Products for the dental-technical laboratory



English

bredent group

Dental innovations for a successful laboratory

Dear Client,



Continually striving for perfection is part of human nature. We, at the bredent group, are committed to abiding by our values to achieve this and take responsibility for our conduct, both within the company and with external parties.

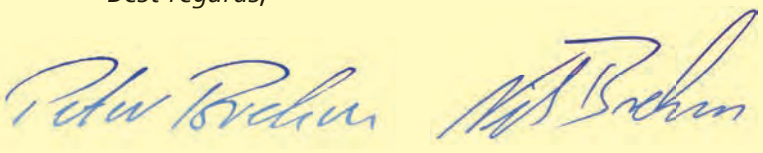
The intensive interaction with reference laboratories and practices has created an exceptionally large potential for product ideas, which are developed over a total operating area of 12,000 m² in Senden/Iller in Germany.

As a client, you understand the benefits of bredent products and thereby contribute to the success of the bredent group. As a family-run company, a relationship based on partnership is incredibly important to us. We would like to thank you personally for this and say that we remain available to you as a direct contact partner.

Do share your ideas on product optimisation and suggestions for an even closer cooperation by e-mailing us at peter.brehm@bredent.com or nils.brehm@bredent.com, or send us a fax on +49 (0) 7309/872-155. We look forward to hearing from you.

We hope you will be impressed when discovering the new - relaunched - bredent dental technology catalogue.

Best regards,



More than 39 years of dental innovations

Peter Brehm *Nils Brehm*

bredent group · Weissenhorner Str. 2 · 89250 Senden · Germany · www.bredent.com · e-mail info@bredent.com
Tel. (+49) 0 73 09 / 8 72-4 40 · Fax (+49) 0 73 09 / 8 72-4 44

bredent group mission statement

The bredent group

We, at the bredent group, are an internationally-active, family-run company that develops and produces optimally coordinated stand-alone products, system solutions (e.g. in implant prosthetics) and „Made in Germany" treatment concepts. These enable dentists and dental technicians to produce and maintain high-quality, cost-effective aesthetic restorations that ensure periodontal hygiene.

We strive to be amongst the best. That is why our employees are ready to deliver excellence for our clients and their patients, with the necessary flexibility and openness.

Our expertise and innovative drive make us the paradigm for the dental market.

We base our corporate culture, our collaboration with our clients and business partners and beneficial activities on our values that we set in 1995 as our foundation for relationships and long-term objectives.

capable

We are convinced of the benefits of our work and willingly endeavour to become more efficient.

cooperative

We are open and fair in our collaborative partnerships. This is how we build trust.

innovative

Our expertise, flexibility and openness to the world allow us to create beneficial solutions at an early stage.

For our clients, this means that:

Our clients have a business partner that can offer benefits thanks to our performance and solutions. All of our activities demonstrate this aspiration. We are attentive to our customers and their requirements, which in turn allows us to keep up to date about any issues and wishes that affect patients. This information forms the basis for the development of new, inspiring and cost-effective solutions – which warrants the benefits of our work for clients and patients. For us, complying with the relevant regulations, standards and legislation is a matter of course.

For our organisation and our employees, this means that:

We see amendments and new requirements as opportunities and as something that challenges us to provide a rapid and flexible response. A capacity for change is therefore a significant prerequisite for our success. Consequently, we are continuously making our organisation quicker and more cost-effective in order to meet the increasing demands of our clients, their patients and of the economic environment.

For our employees, this means that:

We demonstrate engagement and a sense of responsibility in the relevant task, as individuals and as a team. Everyone takes responsibility for their involvement. Everyone is committed to achieving the company's objectives and maintaining the company's values. In return, our employees enjoy a safe place to work, personal development opportunities and scope for professional development and improvement. By using and expanding our collective knowledge, we are laying the foundations for future success.

As far as the way in which we interact with society is concerned, this means that:

We believe that businesses have a responsibility to make a lasting positive social and environmental contribution to society.

Our income serves job security and is a basis for further pioneering investments in line with our goals and values for the benefit of our clients.

The Management
Peter Brehm, Brigitte Brehm

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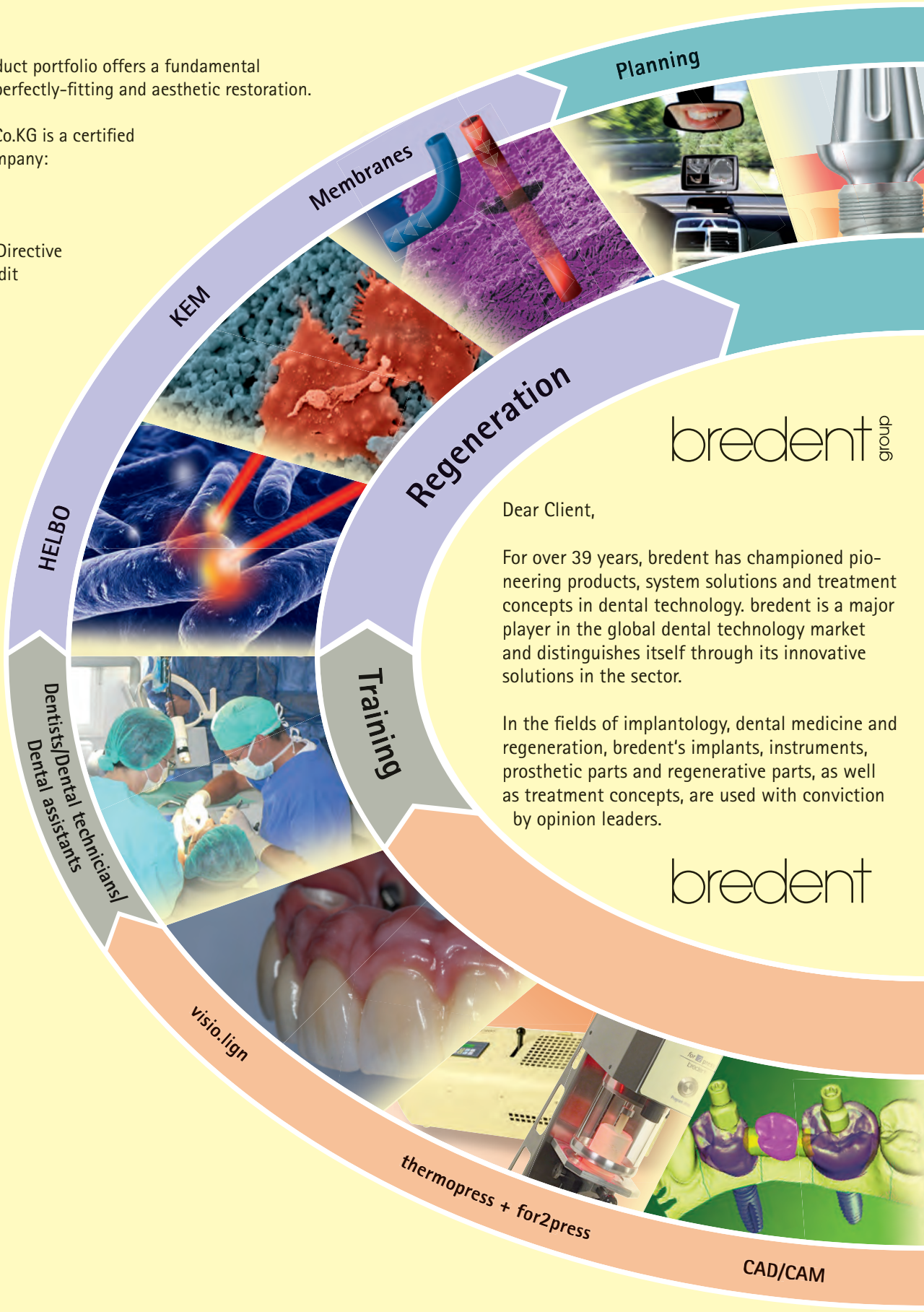
Perfectly-fitting prostheses – a fundamental prerequisite for satisfaction

The bredent symbiosis

A coordinated product portfolio offers a fundamental prerequisite for a perfectly-fitting and aesthetic restoration.

bredent GmbH & Co.KG is a certified medical device company:

DIN EN ISO 9001
DIN EN ISO 13485
European Council Directive 93/42/EEC FDA Audit



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Dear Client,

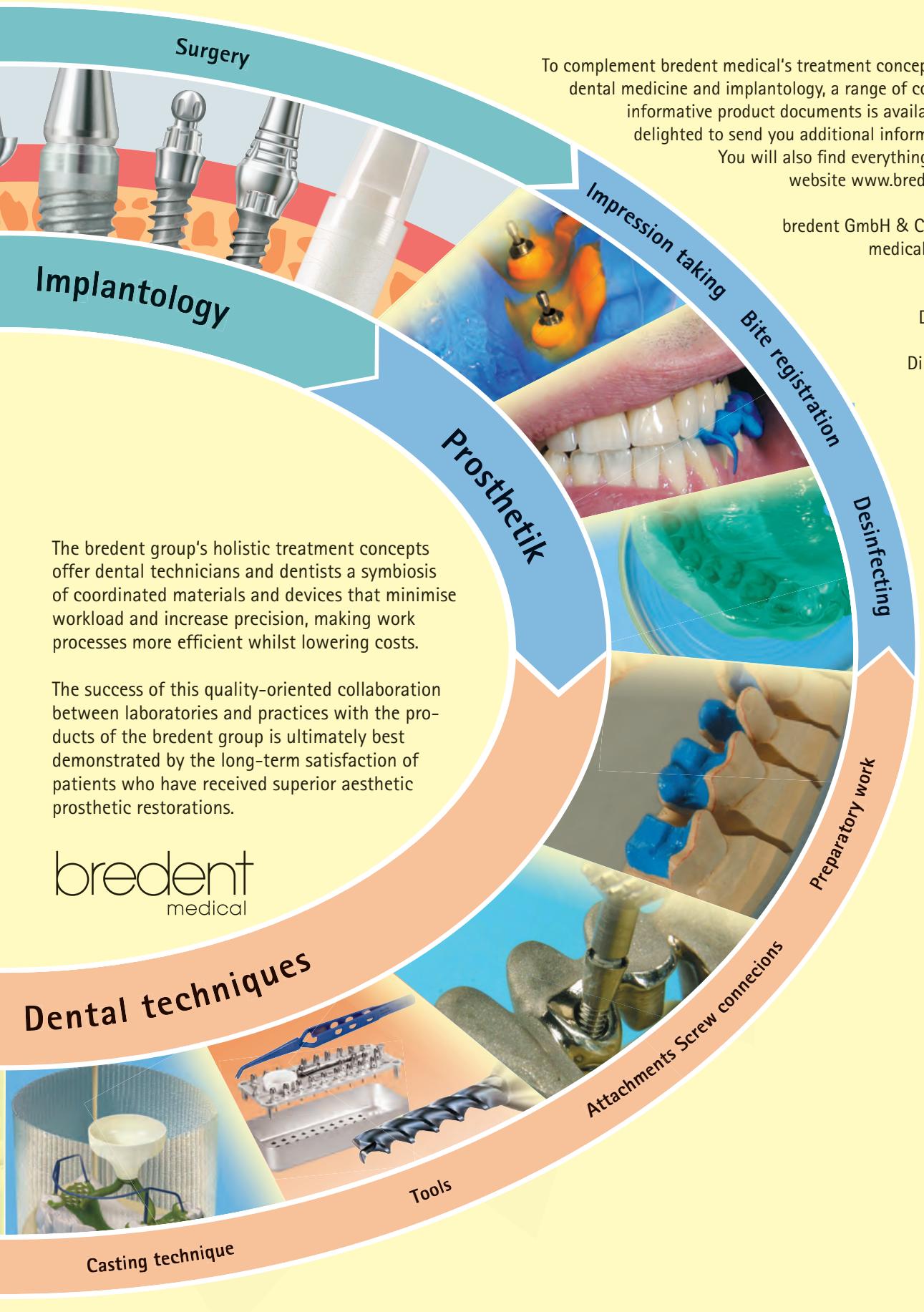
For over 39 years, bredent has championed pioneering products, system solutions and treatment concepts in dental technology. bredent is a major player in the global dental technology market and distinguishes itself through its innovative solutions in the sector.

In the fields of implantology, dental medicine and regeneration, bredent's implants, instruments, prosthetic parts and regenerative parts, as well as treatment concepts, are used with conviction by opinion leaders.

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The bredent group's holistic treatment concepts offer dental technicians and dentists a symbiosis of coordinated materials and devices that minimise workload and increase precision, making work processes more efficient whilst lowering costs.

The success of this quality-oriented collaboration between laboratories and practices with the products of the bredent group is ultimately best demonstrated by the long-term satisfaction of patients who have received superior aesthetic prosthetic restorations.

bredent medical

To complement bredent medical's treatment concepts in the fields of dental medicine and implantology, a range of comprehensive and informative product documents is available. We would be delighted to send you additional information on request. You will also find everything you need on our website www.bredent-medical.com.

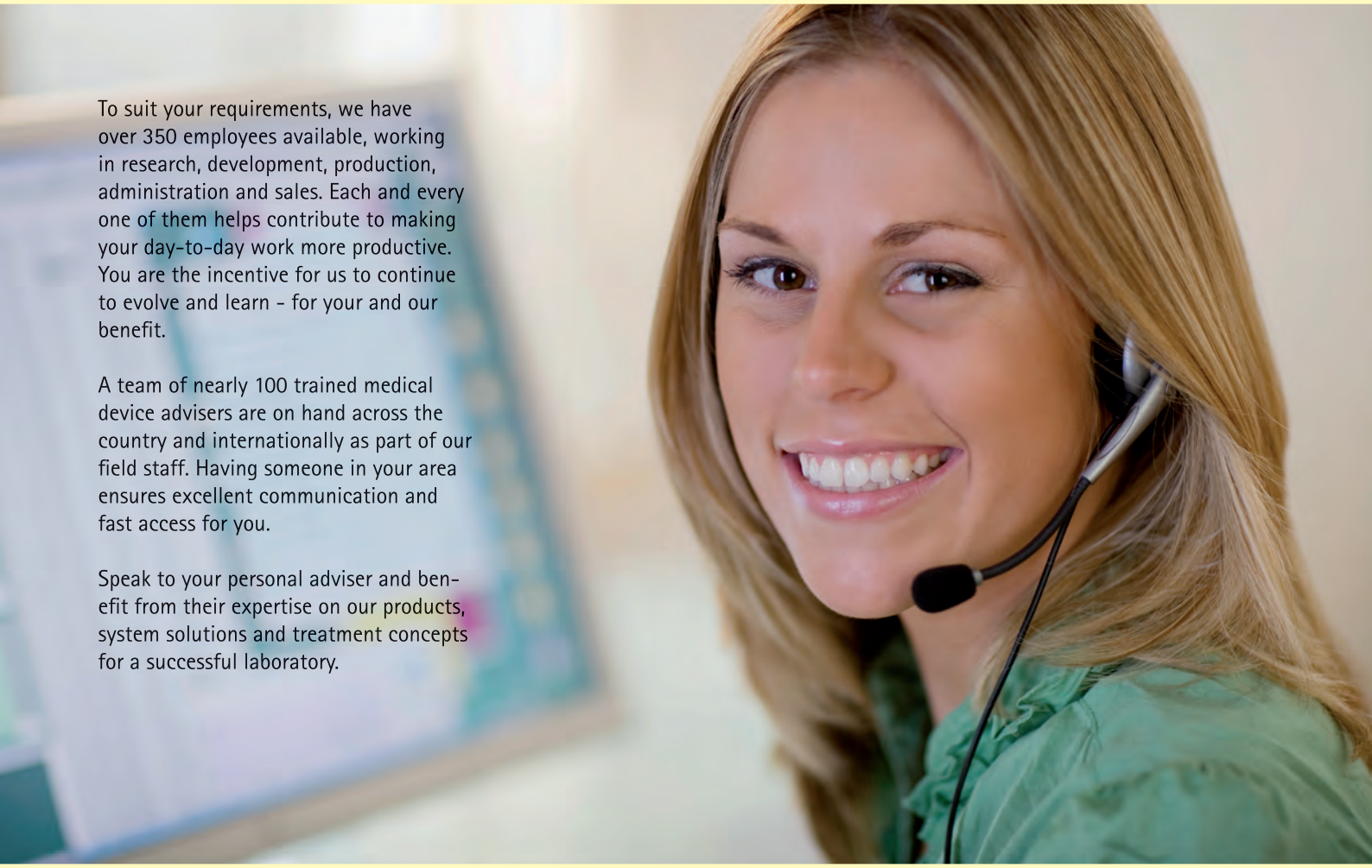
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European Council Directive 93/42/EEC

Cover foto: MDT Oliver Heinzmann, Heppenheim

Communication as a central component on a client relationship

What is the most convenient way to reach us?



To suit your requirements, we have over 350 employees available, working in research, development, production, administration and sales. Each and every one of them helps contribute to making your day-to-day work more productive. You are the incentive for us to continue to evolve and learn - for your and our benefit.

A team of nearly 100 trained medical device advisers are on hand across the country and internationally as part of our field staff. Having someone in your area ensures excellent communication and fast access for you.

Speak to your personal adviser and benefit from their expertise on our products, system solutions and treatment concepts for a successful laboratory.

You can reach us personally:

Monday to Friday	**7.00 a.m. to 4.15 p.m.**
Telephone:	**+49) 0 73 09 / 8 72-4 40**

and 24 hours a day:

Fax:	**(+49) 0 73 09 / 8 72-4 44**
E-mail:	**info@bredent.com**
Internet:	**www.bredent.com**

Orders received by 4 p.m. will be dispatched on the same day.

Deutsche Dental Industrie

Not all products in the current catalogue have been approved or are available in all markets. If you have any questions, please do not hesitate to get in touch with your to contact partner:

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Preparatory work represents the beginning of the fabricatio process in the laboratory. The working model is the basis of the prosthetic restoration. High precision needs to be ensured, which is accomplished through the use of high-quality, matched products. This way errors in the process chain are reduced and the daily work processes are facilitated.





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breciform D impression tray

The proper impression technique to obtain exact models is ensured by the breciform D impression tray.



Special tongue support reduces the patient's gag reflex and hence minimizes sources of errors during impression taking. Essential anatomical requirements were taken into account in the development of the impression tray. With the help of kneading silicone and click-type stops as spacers, breciform D can be easily and quickly adapted and an additional patient session can be avoided.

breciform D impression tray - for single use
Starter set
10 upper and lower trays each
sizes S, M, L and XL
10 breciform D triangular stops
10 breciform D bar-shaped stops
REF 580 UOTS S

brecision impression materials

The silicone-based impression materials that reproduce details very accurately offer ideal preconditions for perfect impression taking thanks to various flow characteristics.



brecision putty soft
With Shore A hardness of 70, brecision Putty soft is a non-sticky and kneadable base impression material based on addition-curing vinyl polysiloxanes. brecision Putty soft can be easily mixed and perfectly cut and adjusted.

brecision putty soft
250 ml base (grey), 250 ml catalyst (white),
2 measuring spoons
Set 4 pieces
REF 580 0002 4



brecision implant heavy
The shore A hardness of 70, accurate reproduction of details, reduced flowability and medium hydrophilicity are preconditions for precise impressions of the situation and fabrication of the dental restoration.

brecision implant heavy
Impression material blue, 1 x 380 ml
5 x dynamic mixers, 1 x bayonet ring blue
REF 580 BH38 0



brecision implant light
The very high hydrophilicity and flowability, very accurate reproduction of details and a shore A hardness of 55 ensure precise impressions of delicate implants or teeth.

brecision implant light
Impression material orange, 2 x 50 ml cartridges
10 mixing cannulas, 10 Intra-oral tips
REF 580 BL05 0

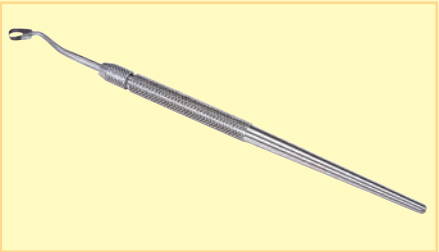


security-bite blue
The thixotropic property of the security-bite blue bite registration material based on A-silicone can be adapted to the arch without dripping. The high Shore A hardness of 90 enables dimensionally stable bite registration and reproduction of all details.

security-bite blue
2 x 50 ml cartridges (blue)
12 contouring tips (wide)
12 mixing cannulas (pink)
REF 580 0002 0

Abdruck-Cut

Undercuts can be easily and specifically removed using the scalpel-sharp loop blade.



Abdruck-Cut
1 Stück
REF 360 0114 0



The scalpel-sharp loop blade allows cutting even in areas difficult to access.

Accessories



Loop knife
1 piece
REF 360 0115 0

Dentaclean impression and denture disinfectant

Disinfecting with Dentaclean impression and denture disinfectant avoids the transmission of viruses, bacteria and fungi – from the patient to the laboratory and hence increases the protection against infections for you.



The concentrate is mixed to obtain 10 liters of ready-to use solution which is highly effective and has a surprisingly mild odor.

Dentaclean impression and denture disinfectant
1000 ml concentrate to obtain
10 liters ready-to-use solution
incl. 25 shipping bags
REF 520 0100 6

Tested and approved by the Institute for clinical hygiene and infection control, Giessen.



Pathogens can be transmitted to the laboratory with impressions.



After the use of Dentaclean impression disinfectant, active viruses, bacteria and fungi can no longer be detected.

Shipping bags

The shipping bags have already been labeled „disinfected".



Additionally, a separate bag holds the refte to protect them against moisture.

Shipping bags
200 pieces
REF 520 0100 2

Disinfection bath 3L

The convenient filter basin enables disinfection of up 6 impressions thanks to the flat and wide design of the disinfection bath 3L. As a result, the efficiency is increased and waiting times are reduced.



- The bredent disinfection bath 3L has a capacity of 3 liters
- Due to the convenient filter basin careful cleaning of impression trays and instruments is simplified
- Direct skin contact with the disinfectant is avoided thanks to the integrated dripping device
- Individualizing of the filter is possible due to moveable instrument rests

Disinfection bath 3L
W 35 x D 26 x H 14 cm
1 piece
REF 230 0015 0



Dripping device prevents direct skin contact with the solution. This guarantees safe every day usage.



The stable bath made of polypropylene is heat resistant up to 135° C and therefore suitable for autoclave and thermo-disinfecting.

Silicone and wax surface tension reducing agent

Enhances the flow properties of plaster for silicone impressions.



Spraying on the silicone and wax tension reducing agent improves the flow properties of plaster for silicone impressions. Before pouring the arch, the impression must be dry.

Silicone and wax surface tension reducing agent
750 ml
REF 540 0070 5



The spraying head of the spray bottle simplifies uniform wetting of the surface with silicone and wax surface tension reducing agent.



After the application of the agent onto the surface (left), the flow characteristics of the plaster have been clearly improved.



Silicone and wax surface tension reducing agent produces a homogeneous plaster surface. This will ensure precise dental work.

Surface tension reducing agent

The surface tension reducing agent for impressions. Cleans, disinfects and improves the flow characteristics of model materials.



The use for silicone, alginate and hydrocolloid impressions reduces stockkeeping.

Surface tension reducing agent
125 ml
REF 520 ES12 5



Refill package
750 ml
REF 520 ES75 0



The fine spray head of the plastic spray bottle simplifies uniform spraying of the liquid.

Accessories for silicone, wax and surface tension reducing agents

Spray bottle, plastic sp
1 piece, 125 ml
REF 540 0075 0



Spray on a thin coat of surface tension reducing agent. Allow to react for 1 to 2 minutes for alginate and hydrocolloid impressions. The blow the impression dry and cast. Condensation cured silicone impressions: the impression is rinsed with water after the reaction time and blown dry subsequently.
The plaster flows without any formation of bubbles and surface segregation.



An accurate impression tray made of stable and deformation-free resin is required for high-precision anatomic impressions, which is ensured by the light-curing tray material from bredent.



The initial situation
The model fabricated using a class III stone.



Blocking out
Simple and fast blocking out of remaining teeth or undercuts with transparent Transblock.



Insulating
The model is insulated with Isoplast ip to avoid adhesion of the tray materials. As a result, the hardened tray can be easily removed.



Tray material UV
The high stability ensures fast working in a way to save time.



Polymerizing
The fully mirrored inner chamber of Polylux 2 offers perfect illumination and hence reliable curing of all areas of the tray material UV.



Processing
Wide range of tungsten carbide and diamond tools for fast processing of the tray material.



Materials used

Transblock	page 12
Isoplast ip	page 12
Tray material UV	page 13
Polylux 2	page 14
Processing tools	page 14

Transblock

The transparent block-out material for fast and systematic working.



The stability of Transblock results in uniform layer thicknesses and can be adjusted individually by scraping.



Any desired size or shape of Transblock can be produced with the help of an instrument or scissors.



The high flexibility simplifies placing onto the model.



Due to its stability a uniform thickness is retained during the adaptation. If required, the thickness can be adapted individually by scraping.



The transparency of Transblock allows to check the thickness of the area that has been blocked out. This way precisely prepared models for individual trays are obtained.

Transblock
250 g
REF 540 0114 9

Isoplast ip

Isoplast ip is alginate based and insulates plaster against resin whilst creating a highly lustrous resin surface.





The brush pen allows to apply the material in an economic and precise way.



Isoplast ip seals the surface and the plaster exhibits a fine luster. This way the quality of the insulating layer can be checked.



Isoplast ip allows removal of the tray without damaging the model.

Isoplast ip
750 ml
REF 540 0101 9

Accessories



Brush pen pk 125
125 ml
REF 390 0033 0



Brush pen pk 20
20 ml
REF 540 0072 0

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Tray material UV

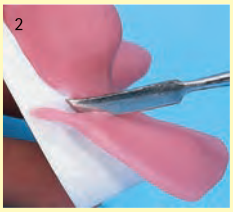
High-stability resin to obtain individual trays for accurate impressions.



The flexibility of the material allows easy placement onto the model without tearing. The required shape can be cut with an instrument. The pink color provides the perfect basis for the set-up. The high stability allow quick placement of the tray handle without any dimensional change until polymerization is completed.



The high flexibility of the material simplifies the placement onto the model. The material will not be damaged.



The tray material UV can be precisely cut with any instrument. Accordingly, the amount of work is reduced.



Perfect adaptation to any situation guarantees uniform wall thicknesses.



Due to the high stability the position of the handle which has been determined will not be changed during the polymerization process.



The tray material UV has hardened after only 10 minutes in the Polylux 2 unit.



The high stability of tray material UV avoids deformation during impression taking. Precise models will be obtained.



Tray material UV
50 pieces UJ
REF 540 0011 0



Tray material UV
50 pieces LJ
REF 540 0011 1

Assortment

25 Tray material UV UJ
25 Tray material UV LJ
REF 540 0011 2



Tray material UV band
2,5 mm x 90 mm
1350 g
REF 540 0016 6

Tray material UV block
1000 g
REF 540 0011 3

Accessories:



Polylux 2
polymerization unit with material container
REF 140 0099 0

Polylux 2

Powerful and universally suitable light-curing unit for dental consumables with a wavelength range of 350 to 500 Nm.



Powerful and universally suitable light-curing unit for dental consumables with a wavelength range of 350 to 500 Nm. Two different and energy-saving special lamps guarantee excellent .

- convenient and simple operation thanks to clearly arranged buttons
- fully mirrored polymerization area for selective illumination with compact drawer
- device can be accessed from three sides to enable polymerization of large objects.
- reduced energy consumption, extended service life

Technical data

Number of light sources	2 fluorescent lamps, 9 watts each
Wavelength range	350 – 500 Nm
Triple timer function	180 sec/360 sec/continuous operation
Mains voltage	230V, 50 Hz
Dimensions of unit	approx. 250 x 120 x 90 mm.
Dimensions interior - drawer	approx. 140 x 110 x 55mm.
Weight	approx. 1.5 kg.

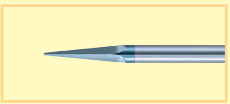
Polylux 2 with drawer, 230 V **REF 140 0099 0**
Polylux 2 with drawer, 115 V **REF 140 0099 1**

Tungsten carbide burs for processing acrylics

The proper selection of tools reduces the amount of work.



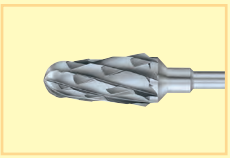
Diatit bur
1 piece
REF D468 GG 16



Diatit bur
1 piece
REF D468 GG 23



The triple cutting tungsten carbide burs are perfectly suitable to cut off excess tray material UV. In case of shellac the shape of he Tungsten carbide bur avoids loading of the cutting edges.



Tungsten carbide
1 piece
REF H194 SH 70



Aggressive cutting of the super-coarse cross-cutting edge allows rough shaping in a very short time.



Tungsten carbide
1 piece
REF H274 GH 60



The medium-coarse cross-cutting edge smoothens the surface and allows finishing in a single working step.

Additional rotating tools in chapter C.



Diacryl grinders
1 piece
REF 340 0102 0

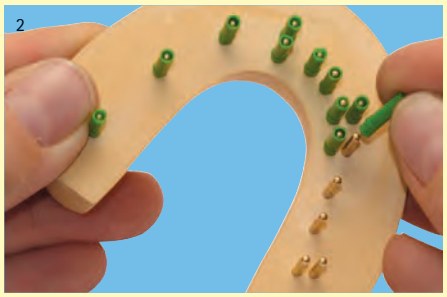


The margin cutter produces a uniform tray margin and creates sufficient space for lip and cheek fraenums.

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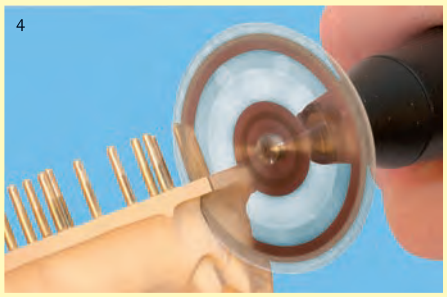
The arch
Highly accurate fabrication of the arch with Exakto-Rock S and ecovac. Marginal stability and accurate reproduction of details reduce the amount of work.



The Master-Pin System
The specially shaped inner geometry of the plastic sleeves and the metal pins ensure perfect fit to facilitate the handling and to provide optimized fit of the working dies and guarantee stress-free working.



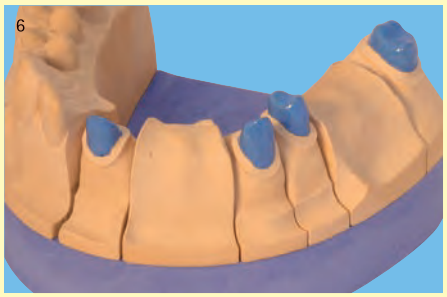
The model system
The Split-Cast model system offers added comfort and facilitates the assembly of models. The low-viscosity Fluid-Rock base stone provides safe retention of pins and can be poured without the formation of bubbles.



Segmentation
The perforated design enables to achieve controlled sawcuts. The high-performance diamond discs available in various diameters allow fast and precise preparation of dies.



Surface processing
The special cut types enables fast and trouble-free processing of plaster. Cracks in the plaster are avoided.



The die varnish
bredent offers varnishes in various colors and thicknesses for surface hardening or as spaces for the cement gap. Tooth-colored varnishes for the veneering technique offer excellent contrast and hence facilitate processing.

The basis for fixed restorations is created by selecting the suitable materials
Depending on further processing - digital or conventional - Exakto-Rock S super-hard stone is used.
The design of the high-precision pins facilitate the removal of the model.

Materials used

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Master-Sep	page 19
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Arti-Rock	page 28
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Die varnishes	page 32
diephos-dentine	page 33
Spacer varnish gold, silver, silver-blue, blue	page 33
Gloss and hardening agent for plasters	page 34

ecovac vacuum mixing system



ecovac

Precision-fit restorations obtained through optimal use of material properties.
The user-friendly and compact design simplifies work and reduces sources of errors. A powerful and maintenance-free vacuum pump, adjustable in two different levels (15 mbars, 200 mbars), ensures bubble-free mixing of materials and results in a perfect casting surface. Stirring time and speed can be adjusted continuously to allow correct processing of different materials.

ecovac (230 V) **REF 140 0093 0**

(Wall mounting, without mixing cup and base)
1 mains cable
1 spare filter
1 drilling template for wall mounting
4 screws and plugs for wall mounting

Accessories

Base ecovac, 1 piece **REF 210 0045 0**



ecovac mixing spiral

The mixing spiral takes up the components to be mixed from all areas of the mixing cup and stirrs them horizontally and vertically. No unmixed materials will remain on the bottom of the mixing cup, which may cause different expansion of the material later on.
All features and components listed provide increased reliability, lead to improved fit when preparing dental restorations and avoid time-consuming reworking.

Mixing spiral,	50 ccm	**REF 140 0R94 5**
Mixing spiral,	250 ccm	**REF 140 0R94 0**
Mixing spiral,	750 ccm	**REF 140 0R94 2**
Mixing spiral,	1000 ccm	**REF 140 0R94 3**



ecovac mixing cups

The smooth inner surface of the stainless steel mixing cup prevents any material or liquid residues from adhering to or depositing in scratches or undercuts. The conical shape ensures that material which has been taken up will flow back to the center of the mixing cup. Accordingly, the mixing ratio is retained exactly and better results can be achieved with minimal effort.

Mixing cup,	50 ccm	**REF 140 0B94 5**
Mixing cup,	250 ccm	**REF 140 0B94 0**
Mixing cup,	750 ccm	**REF 140 0B94 2**
Mixing cup,	1000 ccm	**REF 140 0B94 3**



Mixing cup, D
(for the use in the Degussa mixing unit),
425 ml

REF 140 0B94 4

Exakto-Rock S

Exakto-Rock S is a synthetic super-hard class IV stone with distinctive thixotropy and improved flow properties and is free from formaldehyde.



Reduced expansion is completed after 2 hours and is only 0.08 %. As a result, highly accurate impressions are enabled and precision-fit restorations are ensured. Moreover, thanks to optimized reflection of light, Exakto-Rock S is suitable for scanning and available in crown and ivory.

- fomaldehyde-free stone ensures safe processing and can be used for the fabrication of holistic dentures without any problem
- synthetic components ensure consistent quality and enable the fabrication of precision-fit models
- improved flow characteristics facilitate pouring of several impressions
- optimized reflection of light thanks to special dye pigments reduce reworking/adjustments in the CAD system



Color brown:

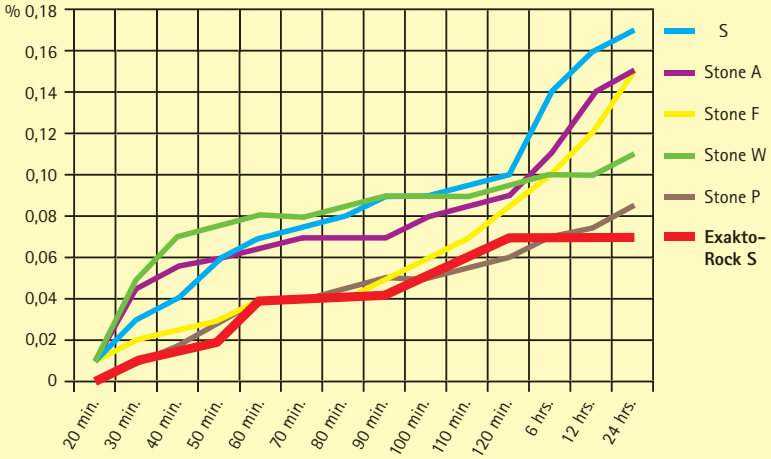
1 x 2 kg	**REF 570 0SB5 2**
5 x 2 kg	**REF 570 0SB5 1**
10 x 2 kg	**REF 570 0SB5 0**



Color ivory:

1 x 2 kg	**REF 570 0SE5 2**
5 x 2 kg	**REF 570 0SE5 1**
10 x 2 kg	**REF 570 0SE5 0**

Expansion of various other stones



Technical data Exakto-Rock S

Color	brown, ivory
Mixing ratio	100 g / 20 ml dist. water
Soaking time	20 sec
Manual mixing time	20 sec
Vacuum mixing time	40-60 sec
Processing time	5-6 min
Setting time (Vicat time)	approx. 10 min
Removal of model after	40 min
Compressive strength after 1 hr	above 60 MPa
Compressive strenght after 24 hrs	85 MPa
Hardness after 1 hr (Brinell)	200 MPa
Hardness after 24 hrs (Brinell)	280 MPa
Linear expansion after 2 hrs	< 0.08 % (no further expansion)

Processing in the ecovac unit:
Vacuum level 1, mixing speed: 390 rpm



The excellent processing time span allows bubble-free pouring of numerous impressions with just a single mix.



Exakto-Rock S offers high stability on the spatula and thixotropic consistency on the vibrator. Simple and clean processing is ensured.



Absolutely accurate reproduction of dimensions of the oral situation thanks to the minimal expansion value (< 0.08 %) so that precision-fit dentures are obtained.



The arches can be cut and trimmed without the formation of chips.



Preparation limits of the dies are not damaged when grinding the dies. No breaking of edges when removing the model. Consequently, precision-fit restorations are obtained.



Perfect surface detection in the scanner facilitates the design and offers the possbility to obtain high-quality, precision-fit restorations. Final expansion is completed after 2 hours and processing can be continued quickly.

Accessories:



KoEx Measuring Device
1 piece including
2 contraction inserts
REF 110 0148 0

More information and reference numbers on page 46.

Master-Pin Radix-S

The sturdy, high-tech plastic provides the required stability and the root shape offers protection against twisting.



Master-Pin Radix-S can be aligned and fixed in the impression very easily and safely.



Master-Pin Radix-S can be easily and safely aligned and fixed in the impression.



Pouring out and preparing the base of the impression are done in the usual way.



Master-Pin Radix-S
1000 pieces
REF 360 0123 1



Radix-S retention rings
1000 pieces
REF 310 0011 1

Optimized harpoon-shaped tip for safe hold in all impression materials (silicones, alginates etc.).



Master-Pin Radix-K

The favourably-priced dowel pin solution for the production of models.



Due to the special root shape only one pin can be used per die. In addition to the retention element, glueing surfaces are integrated to ensure safe hold in the die. The smooth surface of the high-tech plastic allows easy integration and removal of the die.



Perfect glueing is ensured when a small amount of adhesive is also applied to the area of the support.



It is also possible to place interdental Master-Pins Radix-K which are not glued in.



The root shape that is obtained in the model base ensures exact guidance and positioning. The dies are protected against tilting and twisting.



Master-Pin Radix-K
1000 pieces
REF 360 0123 2

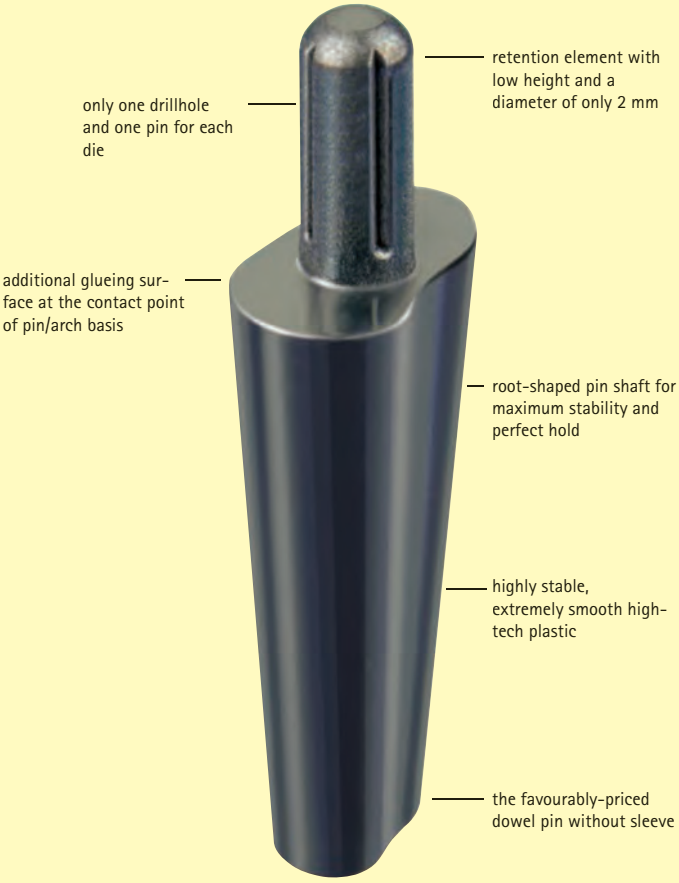


Tungsten carbide drill
Ø 2.0 mm
3 mm shaft
REF 360 0123 3

Assortment

250 Master-Pin Radix-K
1 Tungsten carbide drill

REF 360 0123 4



Master-Sep

Special plaster against plaster separating liquid with unsurpassed separating effect for sawcut models.



Master-Sep
Special separating liquid for sawcut models, 200 ml
REF 520 0029 0

Arch and base can be separated more easily. A soft gliding layer is achieved by wetting the pins.



Master-Sep penetrates into the plaster and seals the surface. Simultaneously, Master-Sep serves as a lubricant between pin and sleeves.

Master pin drill unit mpb 1

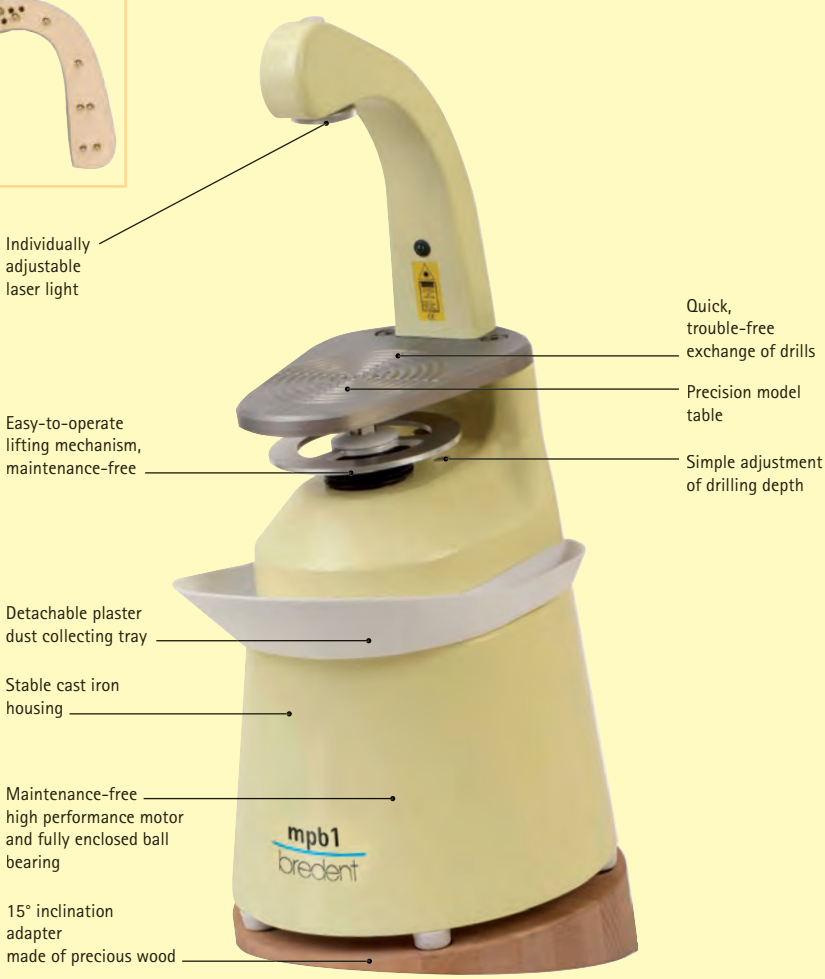
The powerful, high quality and maintenance-free motor features high true running accuracy.

Accordingly, the precision of the drilled hole and the accuracy of the models are increased. Working is simplified thanks to the easy-to-operate lifting mechanism.

Master pin drill unit mpb 1 REF 140 0092 0
(without 15° base)

1 spare fuse
1 Master-Pin Diatit tungsten carbide bur standard/green
1 flat wrench
1 plaster collecting tray
1 plug axle
1 power cord





Accessories:



Adapter base
15° inclination / precious wood
REF 210 0044 0



Tungsten carbide drill
Special drill for Master-Pin Radix-K
Ø 2,0 mm
3 mm shaft
REF 360 0123 3



Master-Pin Diatit tungsten carbide step drill standard/green
REF 360 0119 2



Master-Pin Diatit tungsten carbide step drill special/yellow
REF 360 0119 3

If glueing in of the Master-Pin is too difficult, the special/yellow Master-Pin Diatit tungsten carbide drill can be used to prepare a larger drillhole. The diameter of this drill is 0.1 larger than the one of the standard/green Master-Pin Diatit tungsten carbide drill.



Master-Pin Diatit tungsten carbide step drill special/red
REF 360 0119 4

If the drilled hole is too large to receive the Master-Pin, the special/red Master-Pin Diatit tungsten carbide drill can be used to prepare a smaller drillhole. The diameter of this drill is 0.01 mm smaller than the one of the standard/green Master-Pin Diatit tungsten carbide drill.

Master pin drill unit mpb 1



The diameter of the luminous spot can be adjusted individually to ensure anti-dazzling, precise focusing.



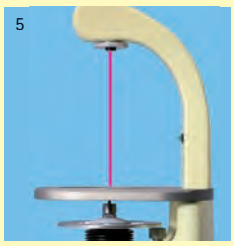
Firmly mounted model table with shape and width adapted to the arch.



Guidelines on the model table allow specific alignment of the model for exact planning of pin holes.



Integrated grooves collect plaster particles and provide the precondition for arches which rest parallelly.



Exact model table mounted at an angle of 90° to the drill subsequently ensures simple removal of the arch from the model base.



The firm hold of the arch allows precise drilling of pin holes. The drill is directed to the arch without any vibration.



Simple screw mechanism for fast and precise adjustment of the drilling depth.



Drills are exchanged without the need to open the unit.





Any resulting plaster particles are automatically collected by the projecting collecting tray.



Unit, motor and collet remain clean, the collecting tray can be removed.

Perfect model fabrication

The combination of Master pin drill unit, Master-Pin sytem, Master-Split model system and Exakto-Rock S provide the basis for precision-fit restorations.
The low expansion of Exakto-Rock S of only 0.08 % and the perfectly-fitting Master-Pins facilitate the daily work and add new brilliance to the dental restoration. This way you can improve the reputation of your laboratory.



Master-Pin System

The pin system for perfect sawcut models.



The small drilling depth of just 4.5 mm in the arch avoids undesired perforation of the arch. Flattening of the soft plastic sleeves is ideal for pins with small distance to each other. The types of plastic of the sleeves and the design of the inner wall ensure soft and controlled removal of the dies. Ideal for bridge models.

Your advantages at a glance



The smallest drilling depth of all pins of only 4.5 mm.
Advantage: no perforation of the arch during drilling and enhanced stability.



The Master-Pin Diatit tungsten carbide drill is adjusted so that the boundary line for drilling of the pin is exactly on the same level as the basis of the arch.



Master-Pin and Master-Pin sleeve can be easily assembled due to the taper and the rounding of the end of the pin.



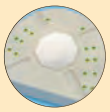
The optimized glueing tip: the adhesive is spread more uniformly in the drillhole and at the glueing shaft. Advantage: safe hold of the Master-Pin in the die.



A length of only 11.7 mm of the Master-Pin sleeves allows to obtain low sawcut models.



The sleeve rises above the Master-Pin. All Master-Pins can be clearly recognized on the underside of the model.





The funnel-shaped design of the Master-Pin sleeve simplifies assembling of die segments and model base.





The unilateral flattening of the Master-Pin sleeves serves to protect against twisting and...



... is the perfect solution in case of drillholes with small distance to each other.

The retentive build-up ensures perfect bonding to the base plaster.



Due to the special surface design of the inner wall of the sleeve, soft friction between Master-Pin and Master-Pin sleeve is achieved whilst ensuring maximum precision and stability.



Master-Pin System

The Master-Pin system simplifies daily fabrication of models since the system components have been matched with each other.



Processing is simple and no new techniques need to be learned. The main advantages of the Master-Pin system are the small drilling depth and the small diameter of the drillhole. Soft integration and removal of the Master-Pin is ensured by the design of the inner wall of the Master-Pin sleeve. This is a particular advantage for bridge restorations. Easy assembling is achieved thanks to the tapering design of the Master-Pin.



Master-Pins
1000 pieces
REF 360 P122 5



Master-Pin sleeves
1000 pieces
REF 360 H122 5



Master-Sep
Special insulating liquid for sawcut models
200 ml
REF 520 0029 0

Assortment

402 pieces
200 Master Pins
200 Master-Pin sleeves
1 Master-Pin Diatit tungsten carbide step drill standard/green
1 Working box

REF 360 0122 6





Master-Pin Diatit tungsten carbide step drill standard/green
3 mm shaft, 1.5/2. 1 piece
REF 360 0119 2



Master-Pin Diatit tungsten carbide step drill special/yellow
3 mm shaft, 1.5/2, 1 piece
REF 360 0119 3
If glueing in of the Master-Pin is too difficult, the special/yellow Master-Pin Diatit tungsten carbide drill can be used to prepare a larger drillhole. The diameter of this drill is 0.1 larger than the one of the standard/green Master-Pin Diatit tungsten carbide drill.

Assortment

2001 pieces
1000 Master-Pins
1000 Master-Pin sleeves
1 Working box

REF 360 0122 5





Master-Pin Diatit tungsten carbide step drill special/red
3 mm shaft, 1.5/2, 1 piece
REF 360 0119 4
If the drilled hole is too large to receive the Master-Pin, the special/red Master-Pin Diatit tungsten carbide drill can be used to prepare a smaller drillhole. The diameter of this drill is 0.01 mm smaller than the one of the standard/green Master-Pin Diatit tungsten carbide drill.



Weigh resp. measure plaster and water to obtain constant results.

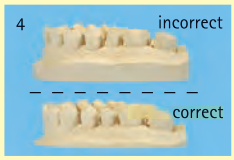


A thermoforming foil is placed on the impression. Uniform thickness of the arch is obtained.



The arch is trimmed to achieve uniform low height.

Master-Pin System



The correct height of the trimmed arch is essential.



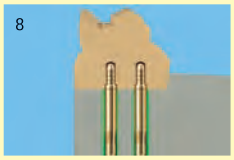
The trimmed surface can be optimized with wet grinding paper.



The inner surface of the dry arch is ground with the plaster bur H263 SH 60 slightly conically (6°) to the base.



The drillholes are positioned with the Master-Pin Diatit tungsten carbide step drill.



Drillholes are prepared- 2 for each die – beginning from the buccal direction:
1. drillhole = center of fissure
2. drillhole = approx. 3 mm away toward the palatal or lingual direction.



The correct alignment of drillholes in the arch.



The upper course of the palatal resp. lingual 6° ground edge is marked with a red pen.



The Master-Pins are precisely glued in the drillholes using cyanoacrylic adhesive.



Arch with Master-Pins glued in.



The arch as well as the Master-Pins are separated with Master-Sep.



The thicker end of the Master-Pin sleeves is put on the Master-Pins.



Even in case of Master-Pins that have only very little distance to each other, the Master-Pin sleeve can be easily used due to the lateral flattening.



The Master-Pin sleeves rise from the Master-Pins by approx. 0.5 mm so that uniform, constant height of the arch is always ensured.



The Master-Split system is used to prepare base for the arch.



Place the prepared arch into the Master-Split model former and align it.



Base plaster is filled up to 1 mm below the deepest point of the red marking line (fig. 10).



After the plaster has hardened, remove the model by pressing it out of the Master-Split model former.



The removed model will receive a Split-Cast separation: the Master-Split during the preparation of the arch without any additional work.



Prior to trimming the model, the Master-Split base former is removed.



The sawcut model is trimmed to the smallest size possible.



The trimmed and dried working model.



The arch is removed from the model base towards the pins - parallely and without tilting.



The base of the arch and the model base must be thoroughly cleaned after trimming to ensure high precision and perfect aesthetics.



The green Master-Pin sleeves are all on the same level and can be clearly recognized on the underside of the model.



The die segments are separated using a Giflex-TR diamond disc.



Perfect fit of the working dies on the model base.



It is also possible to place interdental Master-Pins that are not glued in.



Aesthetically appealing and functional models simplify daily work.



A fine and precise dental restoration is created on a fine model.

Master-Split model system

A universal model system for economical model fabrication for all dental-technical indications.

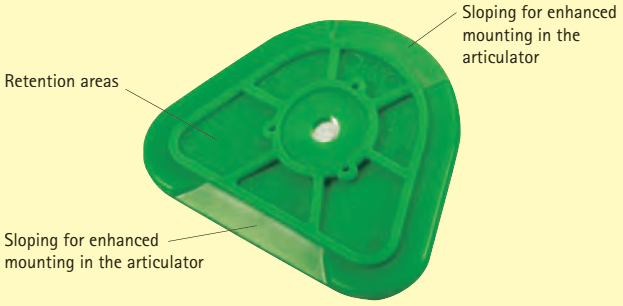


Matched with the Master-Pin system, Master x-tray and Master pls 44. Simple and precise fabrication of the base with integrated Split-Cast which requires little space due to its shape. Three different model formers for crown and bridgework, implant prosthetics, CoCr restorations, full dentures and repairs.

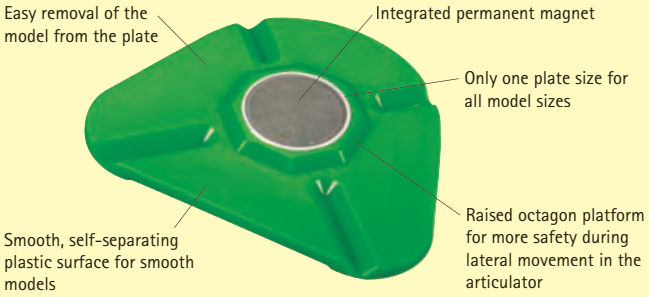
Your advantages at a glance

• **helps to save time**	Production of the model (secondary base) in a single working step.
• **plaster can be saved**	The respective impression size determines which of the three Master-Split model former sizes is used. The plaster consumption is reduced to the minimum.
• **high precision**	Since the model is produced directly on the secondary base (Master-Split base former), a perfectly smooth, precisely fitting model underside is achieved.
• **extended reusability**	All individual components of the Master-Split model system are reusable and durable.
• **excellent cost/benefit ratio**	Since time and plaster are saved, the favourably priced Master-Split model system pays for itself already after it has been used a few times.
• **optimized handling**	Each model will automatically obtain a Split-Cast separation. Due to the model-articulator separation, working is performed on a small, easy-to-use and functional model.
• **small height**	Even in cases of limited space (face-bow model assembly, etc.) the small height of the Master-Split base former allows the use of the Master-Split model system.
• **increased safety**	Due to the additional octagon platform the model is safely and precisely fixed on the Master-Split base former even in the case of lateral movement in the articulator.
• **perfect aesthetics**	Models produced with the Master-Split model system excel by their aesthetic appearance.

Underside



Upper side

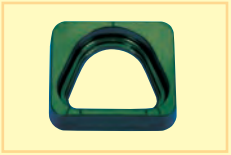


Master-Split model system

A universal model system for economic model fabrication for all dental-technical indications.



Each size of the Master-Split model system consists of two elements. Thanks to the three different Master-Split model formers, the correct size is always available for any size of arches or impressions. Saving of plaster is possible thanks to the range of different sizes. When mounting in the articulator, sufficient space is always ensured due to the small height of the Split-Cast. The surface of the material allows easy cleaning.



Master-Split model former small
2 pieces
REF 360 0118 K



Master-Split model former medium
2 pieces
REF 360 0118 M



Master-Split model former large
2 pieces
REF 360 0118 G



Master-Split base former
10 pieces
REF 360 0118 0



Metal magnetic plates
50 pieces
REF 360 0118 1

Assortment
small

1 Model former
3 Basis former
3 Metal magnetic plates
REF 360 0124 K

Assortment
medium

1 Model former
3 Basis former
3 Metal magnetic plates
REF 360 0124 M

Assortment
large

1 Model former
3 Basis former
3 Metal magnetic plates
REF 360 0124 G

Application examples



Crowns and bridges



Implants and combined prosthetic work



Full dentures and CoCr work



Situation models, repairs

Tip







To ensure exact contact of the model on the Master-Split base former, the completed model is smoothed and cleaned with sanding paper 2 to 3 times. Wax or dirt that will deposit on the four model skids later on will not affect the precision.

Care and cleaning



Plaster and wax residues can be easily recognized on the signal-green plate so that precise working is simplified.





The Master-Split base formers and the Master-Split model formers only need to be cleaned under running water since their surfaces are extremely smooth and self-separating. They are intended to be used for plaster and matched with this material. Additional separating is not required.

bredent group

Master-Split Modellsystem

Processing


1

Regardless which arch or impression size is used


2

the Master-Split model formers fit in every case.


3

The green Master-Split base former – the matching counterpart to the underside of the model.


4

The Master-Split model former is selected according to the size of the impression or the arch.


5

The Master-Split base former is first inserted at the rear edge.


6

After fitting, the plate is positioned and pressed in using both hands.


7

Only then the plate is pressed in again on the table.


8

The plate is only then inserted properly, when there is a 0.1 mm high step at the edge.


9

The Master-Split metal magnetic plate is centered on the Master-Split base former.


10

The arch is aligned according to the markings of the Master-Split model former.


11

In the case of sawcut models the model base is generally prepared with a liquid base plaster, for example Fluid-Rock.


12

After the base plaster has hardened, the model is pressed out.


13

During the preparation of the base the removed die model obtains a Split-Cast separation - the Master-Split - without additional work.


14

Due to the special shape of the sleeve, an indentation is obtained at the model base which simplifies the removal of the plate.


15

The Master-Split base former is removed before the model is trimmed.


16

The model is trimmed with the plaster trimmer to obtain a perfect size.


17

The trimmed and dry working model.


18

If the arch is adequately prepared, trimming is no longer required after preparing the base.

Split-Cast check


1

The position of the model can be easily checked despite the fixed magnet.


2

The solution for a familiar problem


3

The plaster Split-Cast must be trimmed to be integrated into the articulator.


5

An individual plaster control base is much thicker than


7

Plaster control bases often cause problems when they are integrated into articulators


4

The Master-Split base former is the better choice.


6

the specially shaped Master-Split base former


8

whereas the Master-Split base former always provides sufficient space.

Fluid-Rock

Fluid-Rock is a smoothly flowing class IV super-hard stone to prepare bases for models.



The light-blue color can be easily combined with all colors for the arch. The extended processing time allows to pour several bases at the same time. The thin consistency results in perfect flow characteristics and allows to obtain bubble-free models.

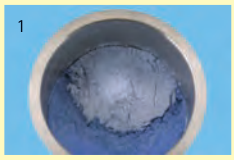
Color - blue:

1 x 2 kg	**REF 570 0FB5 2**
5 x 2 kg	**REF 570 0FB5 1**
10 x 2 kg	**REF 570 0FB5 0**

Technical Data - Fluid-Rock

Color	blue
Mixing ratio	100 g / 25 ml distilled water
Processing time	approx. 6 min at 18° to 20° C
Setting time (Vicat time)	approx. 11 min at 18° bis 20° C
Comp. strength aft. 1 hr	48 N/mm²
Comp. strength aft. 24 hrs	55 N/mm²
Setting expansion	< 0,06 % (no further expansion after 2 hours)

Processing in the ecovac unit:
Vacuum level 1, mixing speed: 390 rpm



Mix Fluid-Rock base stone in the ratio of 100 g powder and 25 ml distilled water to achieve a highly fluid consistency.



Fluid-Rock base stone is directly poured into the model former without using a vibrator.
Perfect flow characteristics allow to obtain models without any bubbles.



Low expansion ensures constant quality when producing models.
Perfectly matched with Thixo-Rock super-hard stones.

Arti-Rock

Low-expansion articulating stone for precision-fit restorations.



Low expansion of only 0.02 % ensures accurate position of the model when aligning according to the anatomic situation. Accurate restorations and reduced grinding time are obtained. Perfect stability and special adhesive capacity simplify mounting in the articulator and ensure safe retention of the models.

Color white:

1 x 4 kg	**REF 570 0AR0 4**
1 x 18 kg	**REF 570 0AR1 8**

Technical Data - Arti-Rock

Color	white
Mixing ratio	100 g / 40 ml dist. water
Processing time span	approx. 3 min.
Setting time (Vicat time)	5 min.
Compressive strength according to DIN	7.2 MPa
Expansion	0.01 % after 20 min. 0.02 % after 48 hrs.



The smooth consistency allows trouble-free and precise mounting of models in the articulator.



When using keys, accurate reproduction of details is achieved thanks to smooth processing of the stone. The final hardness allows easy processing.



The short setting time and low expansion are perfect preconditions for accurate rebasing.

bredent group

Telephone (+49) 0 73 09 / 8 72-4 40

Thermo-syringe



Fixing and glueing, that can be dissolved quickly without any residues, for any type of model situation.
The adhesive resin wax can be moulded by heating and easily placed on the models.

Thermo-syringe
1 Piece
REF 110 0121 1



After heating, the adhesive resin wax is directly applied onto the glueing point using the thermo-syringe. Firm bonding is ensured.



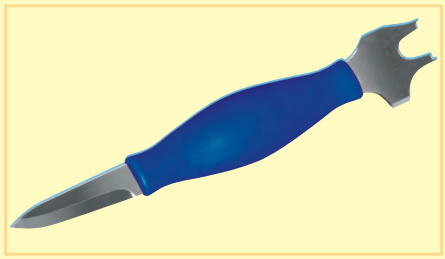
The adhesive resin wax can be applied onto any type of material. Afterwards it can be removed from the objects without leaving any residues.

Accessories:



Adhesive resin wax
Pack cont. 250 g **REF 510 0070 1**
Bucket cont. 1000 g **REF 510 0070 0**

Plaster knife



Multi-purpose knife with ergonomically designed plastic handle for optimum transfer of force, facilitates your daily work.

- Long blade made of stainless hardened steel.
- Dimensionally stable, easy-to-clean hard plastic handle. Ergonomic shape for right and left hand use.
- Multi-purpose element for easy removal of impression tray. Features impact surface with opposing chisel.



The extra long and narrow blade is perfectly suited for cutting off excess plaster in the lingual region.



The special cones on the multi-purpose element simplify removal of the impression tray from the model.

Plaster knife
1 piece
REF 310 0011 4



Plaster edges can be perfectly trimmed with the permanently sharp and stable blade.



When opening flasks, the lateral chisel ensures improved transmission of force thanks to the high leverage effect of the knife handle.



A separate impact surface has been added opposite the chisel to protect the back and the blade of the knife.

Dentaclean plaster removing agent / speed



Ready-to-use solution to remove plaster residues from all surfaces.
The Dentaclean plaster removing agent is available in two types: normal and Speed. The ready-to-use solution removes plaster residues from all surfaces. If no time is to be wasted, Dentaclean Speed should be used.

Plaster removing agent
1000 ml
REF 520 0011 9
2500 ml
REF 520 0099 3

Speed plaster removing agent
1000 ml
REF 520 0101 0
2500 ml
REF 520 0099 4



Hard plaster particles are carefully reduced from the mixing bowl (cup) without any damage.

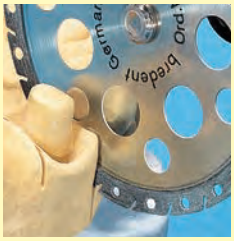


Gentle and fast removal of plaster protects the resin surface and the color.

Giflex-TR

Perforated design for controlled sawcuts.





Giflex-TR is a disc that features diamond-coating on both sides and is particularly suitable for cutting plaster and resin dies. Calculated chip spaces in the area of the diamond coating ensure quick removal of the grinding dust and increase the cutting performance of the disc. Giflex-TR allows quick, smooth and reliable cutting even of very hard plaster and resin. Troublesome chattering and jamming of the disc is avoided.

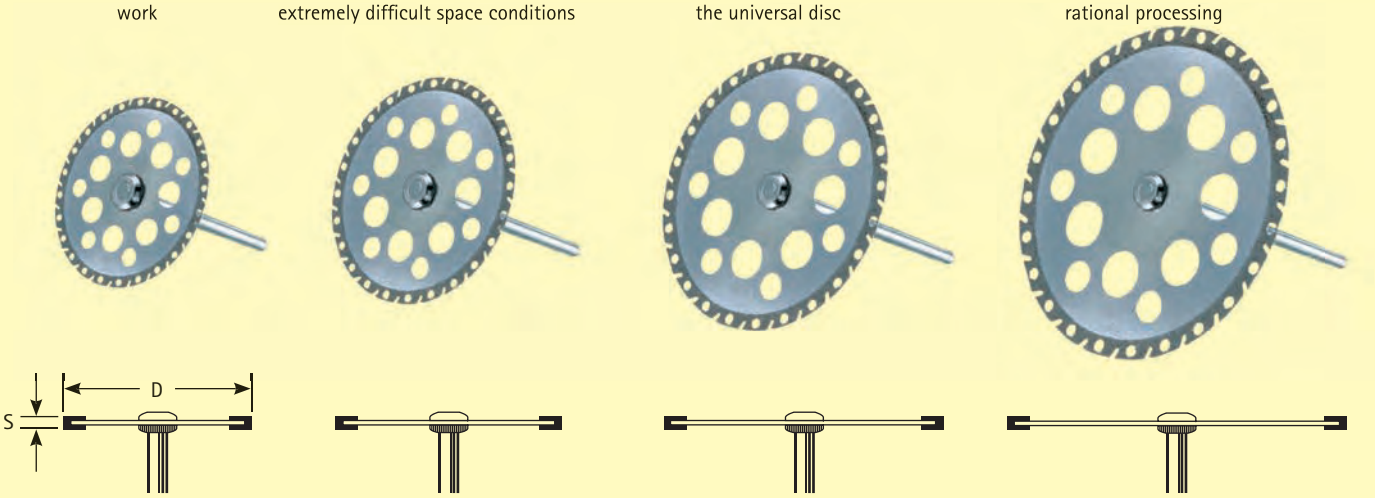
Larger holes in the diamond-free section reduce the friction heat. The disc will not overheat even if deep cuts are carried out.The high running transparency allows a better view onto the saw cut.

Ø 25 mm: for difficult work

Ø 30 mm: perfectly suitable for extremely difficult space conditions

Ø 37 mm: the universal disc

Ø 45 mm: the disc for the rational processing

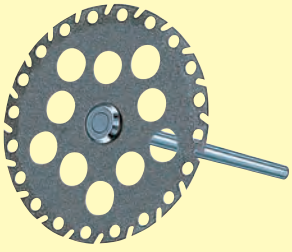


Giflex-TR diamond discs are coated on both sides and ready mounted.

Shaft diameter:	Standard 2.35 mm	Standard 2.35 mm	Standard 2.35 mm	Standard 2.35 mm
REF	**340 0002 5**	**340 0012 0**	**340 0002 0**	**340 0011 0**
ISO-No	806 104 377514 250	806 104 377514 300	806 104 377514 370	806 104 377514 450
Diameter (D):	25 mm	30 mm	37 mm	45 mm
Length (l):	0.3 mm	0.3 mm	0.3 mm	0.3 mm
Recommended speed:	20,000 rpm	15,000 - 20,000 rpm	15,000 - 18,000 rpm	10,000 - 15,000 rpm

Giflex-TR Master x-tray

Special diamond disc for processing resins.

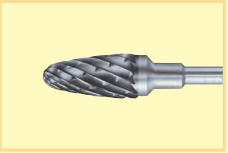


Diamond grinding disc
Giflex-TR
Master x-tray
REF 340 00M2 5

The Giflex-TR Master x-tray features a coarse diamond grit to achieve a cooling effect already in the diamond-coated section when separating resins.

Tungsten carbide burs for processing of plaster

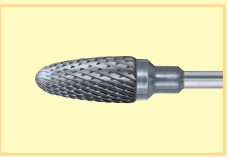
Quick shaping and smooth surfaces for all types of plaster.
The relief protects the sharp blade against breakage of edges. This way the service life of the relief tools is three times longer than the one of comparable burs. Additionally, the processed surface is smoother and a luster is added.



Tungsten carbide
1 piece
REF H263 SH 60



The super-coarse cross-cutting edge allows removal of large quantities of any type of plaster.



Tungsten carbide
1 piece
REF H263 GH 60



The coarse cutting edge allows finer cuts and avoids splintering of the plaster.

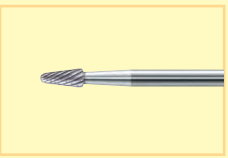
For exact determination of the preparation margin for all die materials.



Rapidy microbur
1 piece
REF H001 NH 31



The cross-cutting edge produces smooth and precise ditches.



Preparation bur
1 piece
REF H263 GH 30



The cylindrical round shape allows to prepare an oblique ditch so that the preparation margin can be recognized more easily.

Litebloc UV

Light-curing resin for blocking-out cavities and building up dies.





The screwable tube allows application of the desired quantity.



The fine dimensional accuracy allows perfect filling of the cavity.

Litebloc UV
3 g
REF 520 0098 0



After a short setting time, Litebloc UV can be coated with any die varnish.

Undercut wax

Precise blocking out of all cavities on the die.



The undercut wax has a high melting point and is therefore perfectly suited for blocking out cavities. No bond with the dipping wax is formed.



The high adhesive capacity of the undercut wax offers reliable hold in the cavity.



Low shrinkage and optimum scraping capacity simplify blocking out.

Undercut wax
25 g
REF 510 0048 0



The high melting temperature also allows the use of the wax below immersion wax copings.

Light-curing die varnish

For smoothening and hardening the plaster surface.



Depending on the plaster and modelling wax, different colors are available. The desired layer thickness can be achieved by applying the varnish several times and can be checked with the help of the color intensity.

Light-curing die varnish

red, 20 ml	**REF 540 0100 3**
yellow, 20 ml	**REF 540 0100 4**
green, 20 ml	**REF 540 0100 5**
blue, 20 ml	**REF 540 0100 0**
transparent, 20 ml	**REF 540 0100 6**



Five different colours to ensure contrast to any type of modelling wax.



The disposable brush allows precise application. The layer thickness can be varied by applying the material several times.



The varnishes are translucent. If they are applied several times, the colour becomes more intense so that the layer thickness can be controlled.



The light-curing die varnishes produce a particulary hard surface which protects the die against damage when fitting on the crowns.



To produce a cement gap, the varnish must be cured immediately after applying. For hardening of preparation margins: Allow die to soak into the plaster, then polymerize. The varnish hardens the surface without layering.

Accessories:



Brush holder, bent
12 pieces
REF 330 0114 1



Brush holder, straight
12 pieces
REF 330 0114 9



Disposable brush
100 pieces
REF 330 0114 2



Mixing block
10 pieces
REF 330 0114 4

Die varnish, light-curing, opaque

Swift application thanks to good masking capacity.



The opaque die varnishes simplify uniform coloring of the varnish coat. The brush is already integrated in the lid. When cleaning the die with steam, the varnish coats remain intact.



Die varnish light-curing opaque is available in three different colors. The fine masking capacity allows to obtain a uniform color of the varnish layer.

Die varnish, light-curing, opaque

red, 20 ml	**REF 540 0010 4**
green, 20 ml	**REF 540 0010 3**
blue, 20 ml	**REF 540 0010 1**

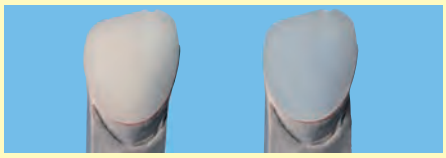


During the application the die varnish diffuses into the plaster surface. Depth polymerization leads to abrasion-resistant bonding to the die. Light-curing die varnish resists high mechanical stress. Even steam-blasting units do not affect the strong bonding.

diephos dentine

Light-curing varnish for abrasion-resistant surface on dies.





diephos dentine conventional varnish

The use of diephos dentine allows simple assessment of the esthetic design and color of all-ceramic restorations.

- quick application
- abrasion-resistant surface by light-curing
- assessment of esthetic appearance on the working model
- resistant to steam

diephos dentine
die varnish, tooth-colored
10 ml
REF 540 0010 0



Two coats of diephos dentine are applied. The first coat is applied very thinly and light-cured for at least 90 seconds. The second coat is applied in a way to ensure complete coverage and light-cured again for at least 90 seconds.



The thickness of the coat can be varied by applying several layers. This way a cement gap can be defined for all-ceramic restoration. The thicknes of a single layer is approx. 12 micro-meters. Light-curing is required after the application of each layer.



Separating liquid can be easily applied and wax-ups can be prepared on diephos dentine.



The modelling material will not falsify the tooth color. An opaque-like effect is achieved on the subsurface.

Spacer varnish gold, silver, silver-blue, blue

Air-drying varnishes with metal components for scratch-resistant surfaces.



Specific layer thicknesses of 5 µm or more can be achieved with these spacer varnishes. Each additional coat increases the layer thickness accordingly. The metal components of the gold, silver and silver-blue spacer varnishes produce highly abrasion-resistant surfaces and hence protect the die. The blue spacer varnish can be used to determine and eliminate premature and undesired contacts when fitting a framework on the model.



The spacer varnishes can be applied easily and dried quickly so that the amount of work is reduced.

Spacer varnish gold
20 ml
REF 550 0000 5

Spacer varnish silver
20 ml
REF 540 0071 7

Spacer varnish silver-blue micro,
20 ml
REF 550 0000 6

Thinner for spacer varnish silver and gold
20 ml
REF 540 0070 1

Thinner for spacer varnish blue and silver-blue
20 ml
REF 540 0069 0



The spacer varnishes gold and silver produce a layer thickness of approx. 10 µ; the spacer varnish silver-blue produces a layer thickness of approx. 5 µ.



The spacer varnishes contain metal components. They produce a particularly abrasion-resistant surface which protects the die against damage.



spacer varnish blue
20 ml
REF 550 0000 7

thinner for spacer varnish blue and silver-blue 20 ml
REF 540 0069 0



The area of the cement gap of 8 – 10 µm in the inside of the crown can be easily recognized thanks to the clear color contrast.



Since the blue spacer varnish is well suited to detect undesired contact points, it can also be used as an alternative to occlusion spray.



The blue spacer varnish can be applied selectively to avoid overlaps which may result from non-uniform application of spray.



Accordingly, early contact points can be quickly eliminated.

Gloss and hardening agent for plasters

Scratch-resistant surfaces for all plaster types without layering.



Gloss and hardening agent for plasters
20 ml
REF 550 0000 1

100 ml
REF 550 0000 2

The gloss and hardening agent for plasters renders the model or die resistant to scratches. Simultaneously, a lustrous surface is achieved with a layer thickness of only 2 µm.



Without the hardening agent models can be dam-aged when the restoration is placed on the model.



The specially adjusted consistency leads to the diffusion into the plaster surface. The high edge stability and scratch resistance avoid damage of any kind.



The gloss and hardening agent for plaster has hardened after only 2 minutes.



Gloss and hardening agent for plaster diffuses into the plaster so that it can also be used on the preparation margin.



The functional margin
The use of functional margin wax enables exact preparation of the functional margins of the model.

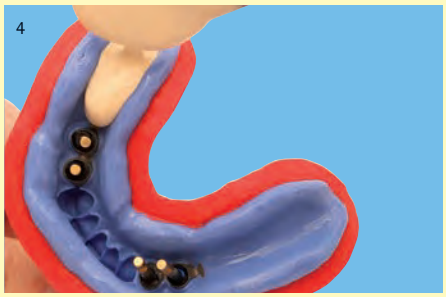


The resin dies
The stable resin dies are quickly and easily produced using Pi-Ku-Plast modelling resin and retention pins to ensure reliable retention.



The proper mixture
The special mixing spiral and abrasion-resistant stainless steel mixing cups guarantee a homogeneous mixing process.

One of the most important components for your success!



The model materials
With a final expansion of only 0.08% after 2 hours, Exakto-Rock S offers utmost precision.
Both stones impress with rapid hardening and good processing properties. 5 different colors for all requirements.



The Split-Cast system
The model formers with integrated Split-Cast facilitate the fabrication and help to avoid compromising the accuracy of fit when assembling models.



The control
The KoEx measuring device enables the control of expansion and contraction of various materials to verify the precision so that materials can be processed in a very reliable manner.

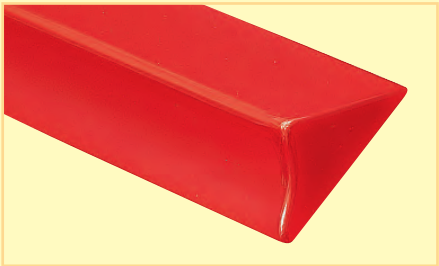
Only high-quality products are used for the fabrication of the master model. The precision of fit to be achieved is ensured by the low-expansion and thixotropic Exakto-Rock S stone. The ecovac vacuum mixing unit with its abrasion-resistant mixing cups is recommended for proper and homogeneous mixing of the materials. The matched range of products facilitates the fabrication of the model and enables convenient working.

Materials used:

Functional margin wax	page 36
Retention pins	page 36
Pi-Ku-Plast / Pi-Ku-Plast HP 36	page 37
ecovac vacuum mixing system	page 38
Exakto-Rock S	page 38
Exakto-Form	page 39
Master-Split model system	page 40

Functional margin wax

To produce perfect functional margins.



To produce perfect functional margins.
The slightly sticky, flexible functional margin wax allows simple and safe positioning to each impression material. Final fixation is achieved by waxing up. Accordingly, uniform design of functional margins is possible.



The completed functional tray represents the best prerequisite for precise models with a perfect functional margin.

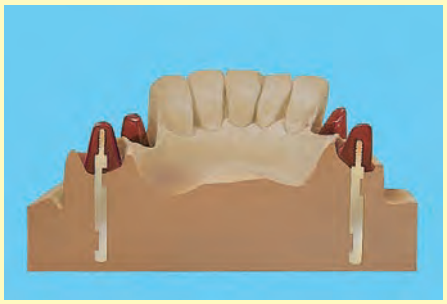
Functional margin wax
175 g
REF 430 0150 0



Uniform and ideal functional margins in the model guarantee perfect fit of the denture.

Retention pins

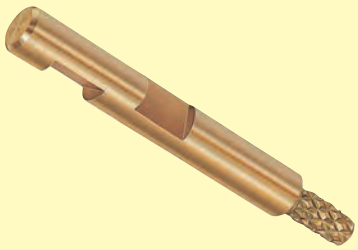
The retention pins feature retentions to guarantee safe hold when fabricating resin dies.



Also perfectly suited for milled models.



The particularly stable retention pins can be used for all resin dies.





Retention pins
100 pieces
REF 360 0000 1
500 pieces
REF 360 0000 2

Telephone (+49) 0 73 09 / 8 72-4 40

Pi-Ku-Plast / Pi-Ku-Plast HP 36

For precision-fit and stable resin dies in next to no time.



Brush resin in 5 different colors. Both resins only differ in their contraction values. HP 36 features a contraction of 0.036 %. Since the resin hardens quickly, it is perfectly suitable for the fabrication of resin dies or resin copings in the double crown technique.



Apply a thin coat of vaseline to the inside of the crowns.



The excellent modelling characteristics allow precise filling of the crowns within a very short time.



Pi-Ku-Plast HP 36 features a very short setting time. Therefore the retention pins can be placed directly into the resin.



This way, Pi-Ku-Plast HP 36 allows to produce accurate and particularly stable resin dies within a very short time.



Resin dies are the perfect basis for precision-fit dentures.



The high stability of Pi-Ku-Plast HP 36 allows to obtain a stable basis for all types of milling work.

Assortments, large Pi-Ku-Plast

3 vessels
1 brush size each A+B
1 brush holder
100 ml cleaner
100 ml monomer
85 g polymer

blue	**REF 540 0017 3**
yellow	**REF 540 0017 4**
orange	**REF 540 0017 5**
red	**REF 540 0017 6**
transparent	**REF 540 0017 7**

Assortments Pi-Ku-Plast HP 36

3 vessels
1 brush size each A+B
1 brush holder
100 ml cleaner
100 ml monomer
85 g polymer

blue	**REF 540 0021 9**
yellow	**REF 540 0021 7**
orange	**REF 540 0021 8**
red	**REF 540 0022 0**
transparent	**REF 540 0021 6**

Refill packages

100 ml cleaner		**REF 540 0016 9**
85 g polymer		**REF 540 0016 7**
100 ml monomer	blue	**REF 540 0016 8**
	yellow	**REF 540 0017 8**
	orange	**REF 540 0017 9**
	red	**REF 540 0018 0**
	transparent	**REF 540 0018 1**

Refill packages

100 ml cleaner		**REF 540 0022 4**
85 g polymer		**REF 540 0021 5**
100 ml monomer	blue	**REF 540 0021 3**
	yellow	**REF 540 0021 1**
	orange	**REF 540 0021 2**
	red	**REF 540 0021 4**
	transparent	**REF 540 0021 0**

Refill packages

Vessel cleaner, 8 ml	**REF 540 0017 2**
Vessel monomer, 8 ml	**REF 540 0017 1**
Vessel polymer, 8 ml	**REF 540 0017 0**
brush size A and brush holder, pack. cont. 3 pcs	**REF 330 0114 6**
brush size B and brush holder, pack. cont. 3 pcs	**REF 330 0114 7**

Refill packages

Vessel cleaner, 8 ml	**REF 540 0020 9**
Vessel monomer, 8 ml	**REF 540 0020 7**
Vessel polymer, 8 ml	**REF 540 0020 8**
brush size A and brush holder, pack. cont. 3 pcs	**REF 330 0114 6**
brush size B and brush holder, pack. cont. 3 pcs	**REF 330 0114 7**

Assortments, small Pi-Ku-Plast

20 ml cleaner
2 mixing trays, silicone, red
20 ml monomer red
1 brush size B + brush holder
12 g polymer

REF 540 0019 6



Pi-Ku-Plast separating varnish
10 ml
REF 540 0018 2

ecovac vacuum mixing system



ecovac

Precision-fit restorations obtained through optimal use of material properties.
The user-friendly and compact design simplifies work and reduces sources of errors. A powerful and maintenance-free vacuum pump, adjustable in two different levels (15 mbars, 200 mbars), ensures bubble-free mixing of materials and results in a perfect casting surface. Stirring time and speed can be adjusted continuously to allow correct processing of different materials.

ecovac (230 V) **REF 140 0093 0**

(Wall mounting, without mixing cup and base)
1 mains cable
1 spare filter
1 drilling template for wall mounting
4 screws and plugs for wall mounting

Accessories:

Base ecovac, 1 piece **REF 210 0045 0**







ecovac mixing spiral

The mixing spiral takes up the components to be mixed from all areas of the mixing cup and stirrs them horizontally and vertically. No unmixed materials will remain on the bottom of the mixing cup, which may cause different expansion of the material later on.
All features and components listed provide increased reliability, lead to improved fit when preparing dental restorations and avoid time-consuming reworking.

More information and reference numbers on page 16.

Exakto-Rock S

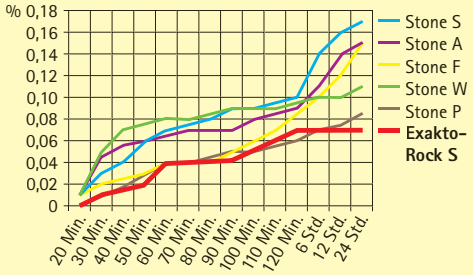
Exakto-Rock S is a synthetic super-hard class IV stone with distinctive thixotropy and improved flow properties and is free from formaldehyde.



Reduced expansion is completed after 2 hours and is only 0.08 %. As a result, highly accurate impressions are enabled and precision-fit restorations are ensured. Moreover, thanks to optimized reflection of light, Exakto-Rock S is suitable for scanning and available in crown and ivory.

- fomaldehyde-free stone ensures safe processing and can be used for the fabrication of holistic dentures without any problem
- synthetic components ensure consistent quality and enable the fabrication of precision-fit models
- improved flow characteristics facilitate pouring of several impressions
- optimized reflection of light thanks to special dye pigments reduce reworking/adjustments in the CAD system

Expansion of various other stones





The excellent processing time span allows bubble-free pouring of numerous impressions with just a single mix.



Exakto-Rock S offers high stability on the spatula and thixotropic consistency on the vibrator. Simple and clean processing is ensured.



Absolutely accurate reproduction of dimensions of the oral situation thanks to the minimal expansion value (< 0.08 %) so that precision-fit dentures are obtained.

More information and reference number on page 17.

Exakto-Form

Model resin for accurate reproduction and maximum edge stability in five different colors.



Processing does not require to change familiar working processes.



Component A
yellow
1 x 50 g
REF 520 0017 8



Component A
light-ivory
1 x 50 g
REF 520 0017 6



Component A
olive green
1 x 50 g
REF 520 0017 4



Component A
grey
1 x 50 g
REF 520 0017 5



Component A
signal blue
1 x 50 g
REF 520 0017 7



Component B
1 x 50 g
REF 520 0017 3

Assortments cont. 240 g each

6 x 20 g A yellow
6 x 20 g B **REF 520 2028 4**

6 x 20 g A light-ivory
6 x 20 g B **REF 520 2028 2**

6 x 20 g A olive green
6 x 20 g B **REF 520 2028 0**

Assortments cont. 600 g each

6 x 50 g A yellow
6 x 50 g B **REF 520 0028 4**

6 x 50 g A light-ivory
6 x 50 g B **REF 520 0028 2**

6 x 50 g A olive green
6 x 50 g B **REF 520 0028 0**

6 x 50 g A grey
6 x 50 g B **REF 520 0028 3**

6 x 50 g A signal-blue
6 x 50 g B **REF 520 0028 1**

Accessoires:



Stirring sticks
250 mm long, 100 pcs
REF 390 0031 0

Mixing cups
120 ml, 100 pcs
REF 390 0030 0



Measuring syringes
20 ml, 50 pcs
REF 390 0036 0



Exakto-Form Insulating liquid
125 ml
REF 520 0021 0



Prior to mixing, each component must be stirred so that a homogeneous mixture is obtained. Mix the sediment completely.



Add component A to component B; empty tin completely.



Mix Exakto-Form approx. 30 sec. until a uniform colour is obtained.



Two tins of Exakto-Form are sufficient to produce 2-3 complete dental arches.



The material can be removed after just 30 minutes. Final hardness is achieved after 90 minutes. Then the material can be trimmed.



If a base for the model is to be produced with Exakto-Form, the model must be previously insulated with Exakto-Form insulating liquid.



Due to its high edge stability Exakto-Form is perfectly suitable for precision-fit bridge and crown work.



Any technique can be used for sawing Exakto-Form models. Familiar working processes do not need to be changed.



If smaller quantities are used, fill component A and B into a separate syringe.



Fill equal portions of Exakto-Form into a silicone cup (approx. 2 ml each for one die) and mix to obtain a homogeneous consistency. Please note: material in the syringes must be processed within 5 days.



Pour Exakto-Form into the impression. The excellent flow properties avoid the formation of bubbles even in impressions with thin edges.



The hardened resin can be drilled and trimmed. The stability avoids dimensional changes and guarantees precise models.

Master-Split model system

The universal model system for economic fabrication of all areas relevant in dental techniques.

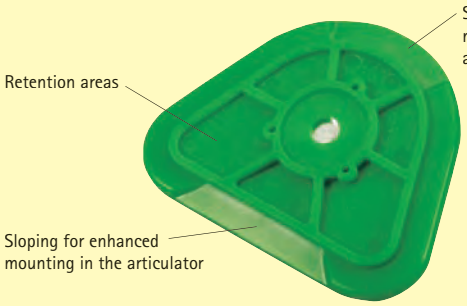


Matched with the Master-Pin system. Simple and precise fabrication of the base with integrated Split-Cast which requires little space due to its shape. Three different model formers for crown and bridgework, implant prosthetics, CoCr restorations, full dentures and repairs.

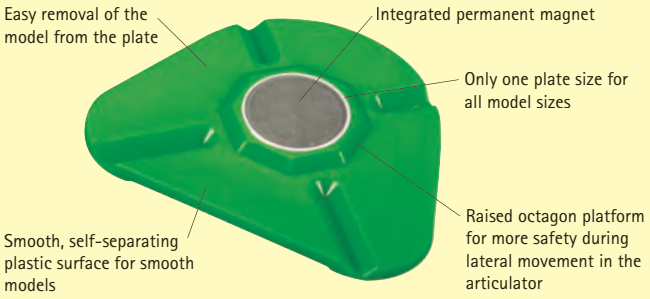
Your advantages at a glance

• **helps to save time**	Production of the model (secondary base) in a single working step.
• **plaster can be saved**	The respective impression size determines which of the three Master-Split model former sizes is used. The plaster consumption is reduced to the minimum.
• **high precision**	Since the model is produced directly on the secondary base (Master-Split base former), a perfectly smooth, precisely fitting model underside is achieved.
• **extended reusability**	All individual components of the Master-Split model system are reusable and durable.
• **excellent cost/benefit ratio**	Since time and plaster are saved, the favourably priced Master-Split model system pays for itself already after it has been used a few times.
• **optimized handling**	Each model will automatically obtain a Split-Cast separation. Due to the model-articulator separation, working is performed on a small, easy-to-use and functional model.
• **small height**	Even in cases of limited space (face-bow model assembly, etc.) the small height of the Master-Split base former allows the use of the Master-Split model system.
• **increased safety**	Due to the additional octagon platform the model is safely and precisely fixed on the Master-Split base former even in the case of lateral movement in the articulator.
• **perfect aesthetics**	Models produced with the Master-Split model system excel by their aesthetic appearance.

Underside



Upper side



Application examples



Crowns and bridges



Implants and combined prosthetic work



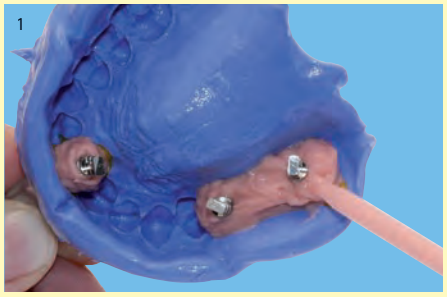
Full dentures and CoCr work



Situation models, repairs

More information and reference numbers from page 25.

bredent group


1

The soft gingival mask
After fixation of the laboratory analogs, the soft gingival mask is simply placed into the impression using the dispensing device. This way the soft tissue (gingiva) is exactly reproduced.


2

Model fabrication
The thixotropic super-hard stone is used to fabricate the model in a way to save material.


3

The model system
The Master-Split model systenm facilitates the fabrication of high-quality models and reduces the mounting height of the models thanks to the integrated Split-Cast.


4

The working model
The use of high-quality materials creates the basis for high precision of fit of dental restorations. A harmonized system - from the impression to low-expansion stone and the casting technique!

To avoid any change of the implant position caused by expansion while the plaster hardens, bredent offers a stone (plaster) with an expansion of only 0.08% after 2 hours. As a result, the oral situation can be accurately reproduced.

Materials used

Multisil-Mask soft	page 42
Multisil-Mask hard	page 43
haptosil D	page 44
KoEx Measuring Device	page 45

Multisil-Mask soft



Accurate reproduction of gingival tissue.
Quick and economical processing with the cartridge system and the especially adjusted silicone allow trouble-free direct application into the impression or the matrix. The natural color of the gingival mask supports perfect shade determination of the veneer. Overdimensioning of margins is recognized immediately.

Multisil-Mask soft 50 ml cartridges
REF 540 0104 7



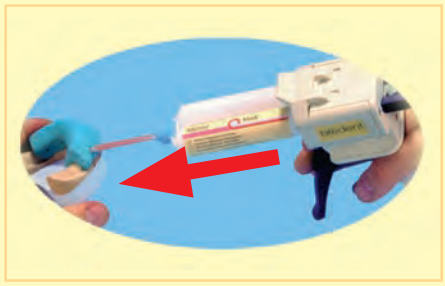
esthetic



informative



efficient





Mixing cannulas
Size 1 / blue
REF 320 0045 0



Multisil-Sep
10 ml insulating liquid
REF 520 0100 3

Assortment

2 x 50 ml Multisil-Mask soft
24 Mixing cannulas
10 ml Multisil-Sep
REF 540 0104 1



The gingival situation on the unsawed sawcut model ...



... is reproduced using haptosil D kneading silicone and then the arch is sawed.



The sawcuts are coated with wax.



Openings (inlet and outlet) are drilled into the matrix using the locating matrix drill and Multi-Sep is applied.



The dispensing device with cartridge and cannula is held to the opening. Whilst applying the material from the dosing device, the matrix is fixed on the model ...



... to obtain the correct position of the gingival mask.

Accessories:



Dispensing device
1 piece
REF 320 0044 0

bredent group
Telephone (+49) 0 73 09 / 8 72-4 40

Multisil-Mask hard



Special resin for hard gingival masks featuring stable consistency and ideal processing characteristics.
The hardness allows torsion-free and accurate placement on the model. The Vario-Stud-Snap vks-oc system is used for fixation.
Divergent implants are aligned using the implant compensating cones developed by bredent.



Multisil-Mask hard
50 ml cartridge
1 piece
REF 540 0113 3

Mixing cannula blue
12 pieces
REF 320 0045 0

Assortment

2 x 50 ml Multisil-Mask hard in cartridges
24 pieces mixing cannulas
1 Assortment implant compensating cones
8 pieces patrixes vks-oc 1.7 mm
8 pieces matrixes vks-oc 1.7 mm
REF 540 0113 4



Implant compensating cones
Ø 3.5 mm, 12 pieces
REF 430 0703 5
Ø 4.0 mm, 12 pieces
REF 430 0704 0
Ø 4.5 mm, 12 pieces
REF 430 0704 5
Ø 5.0 mm, 12 pieces
REF 430 0705 0
Ø 5.5 mm, 12 pieces
REF 430 0705 5

Assortment

Implant compensating cones
20 pieces, 4 pieces each 3.5; 4.0; 4.5; 5.0; 5.5;
REF 430 0739 2

Accessories:



Matrix vks-oc 1.7 mm
8 pieces
REF 430 0659 0



Metal transfer patrixes 1.7 mm
8 pieces
REF 430 0662 0



Dispensing device
1 piece
REF 320 0044 0

Accessories:



Light-curing die varnish
transparent
20 ml
REF 540 0100 6



The marginal fit of the individual abutment to the implant can always be checked.



Multisil-Mask hard permits reliable adapting of individual attachments and framework designs.



Accurate placement of pontics can be easily achieved with Multisil-Mask hard.

Processing



Initial situation of the implant restoration with laboratory abutments.



Place the implant compensating cones on the laboratory abutments in a way to ensure that the wide side is in the angulated area.



Fill Multisil-Mask hard around the laboratory abutments at the height of the compensating cones.



Use tweezers to insert the matrixes vks-oc into the soft resin immediately after injecting the resin.



Trim the gingval mask from the basal side to obtain a straight margin.



Apply vaseline to separate the gingival mask against plaster.



Snap in of the metal transfer patrixes in the matrixes.



Fill the impression with Thixo-Rock and then ...



... box the impression with the Master-Split model system.



Use an instrument to lift the gingigal mask carefully off after boiling out the compensating cones.



The gingival mask is safely retained by the vks-oc matrixes and can always be repositioned in an accurate manner.



The completed gingival mask. Apply transparent die varnish to protect the gingival mask against scratches and to improve the aesthetic appearance.

haptosil D





Addition-curing kneading silicone with a Shore A hardness of 90 for the fabrication of stable and exact keys and models.
Models for repairs and extensions can also be fabricated within a short time. Consequently, an enormous amount of time can be saved compared to conventional model fabrication.

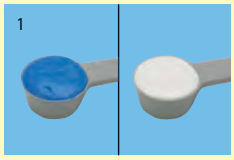


haptosil D
Component A and B
1300 g each
REF 540 0118 0

haptosil D
Component A and B
7500 g each
REF 540 0119 0



Precise reproduction of details with haptosil D reduces reworking time since highly accurate keys can be produced.



Equal quantities of haptosil D are removed using the enclosed portioning spoon.



Processing time is 90 - 120 seconds after mixing both components. Both components are kneaded to obtain a homogeneous mixture.



Make sure to achieve a uniform color when mixing the components; only after a uniform color is obtained, haptosil D has been properly mixed and hardens completely and evenly.



Exert uniform pressure to press haptosil D onto the desired spot/area. The softness allows accurate impressions also in areas difficult to access.



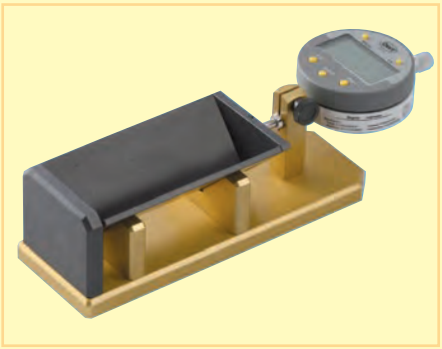
The Shore A hardness of 90 ensures a stable and safe key, which will not tear when it is removed.

Technical data **haptosil D**

Addition-curing kneading silicone	
Hardness:	90 Shore A
Tear strength:	4.86 N/mm²
Deformation under pressure:	1.24%
Elongation:	15%
Processing time:	90-120 seconds
Hardening time:	approx. 5-6 minutes

KoEx Measuring Device

Why are there differences in fit between model and oral situation? For the first time, the KoEx measuring device allows to measure contraction and expansion of materials.



Facilitating contraction and expanding measurements for the first time

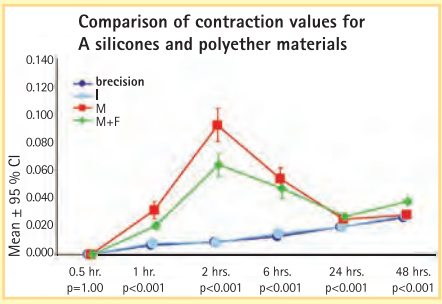
Why do discrepancies in fit exist between the cast and the intraoral situation?

KoEx Measuring Device
1 piece including
2 contraction inserts
REF 110 0148 0

Impression Materials, Contraction

Studies have indicated that impression materials differ greatly in their contraction (shrinkage) behavior, reproducing the oral situation inaccurately. The brecision impression material provides stable values after two hours, permitting further processing to be performed rapidly.

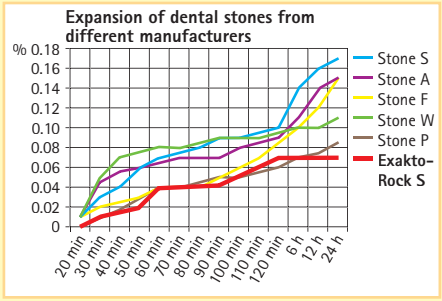




Dental stone, Expansion

Check the expansion values for your dental stone materials and compare them to those of bredent's Exakto-Rock S. Exakto-Rock S expands by a maximum of 0.06 % after two hours; after 48 hours, the expansion is still less than 0.08%.

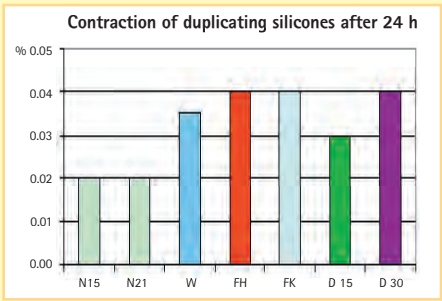




Silicone duplicating materials, Contraction

Contraction measurements of different silicone duplicating materials have shown substantial differences between these. Exaktosil N15 was stable at 30 minutes, at 0.02 %. The values for other duplicating silicones changed after 24 hours, adversely affecting the fit of the restoration.





Investment compound, Expansion

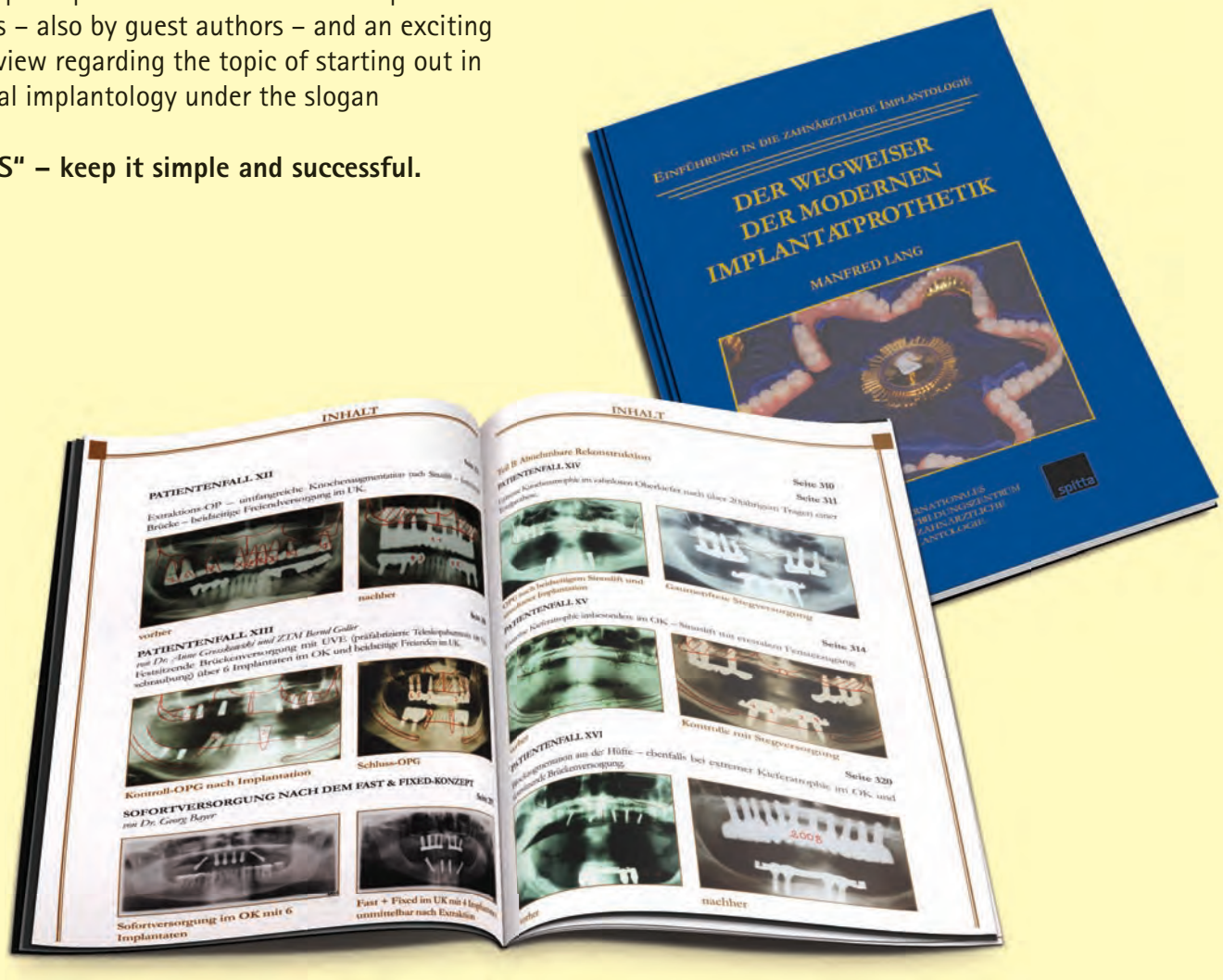
Investment compounds that can be controlled exactly and individually are a prerequisite for non-precious alloy precision one-piece attachment casting as well as for K+B plastic injection molding using thermopress 400.



THE GUIDE FOR MODERN IMPLANT PROSTHETICS

A comprehensive guide on the rapid development of implant prosthetics with numerous patient cases – also by guest authors – and an exciting overview regarding the topic of starting out in dental implantology under the slogan

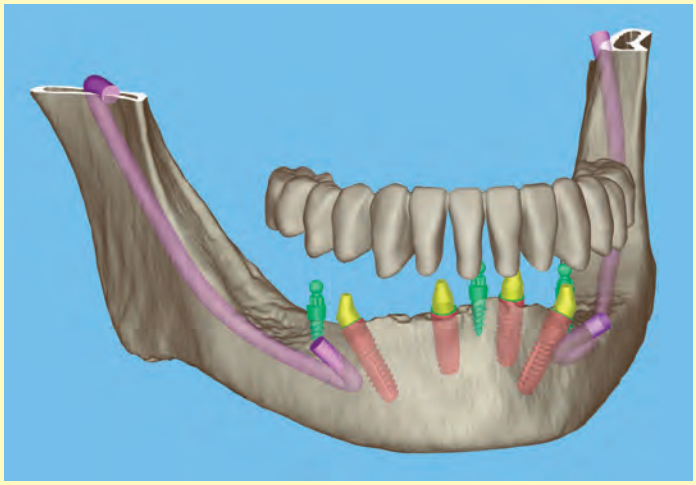
„KISS" – keep it simple and successful.



REF 9929700D (German)
REF 992970GB (English)

Prosthetic planning / 3D implant planning is the first stp in the fabrication process of an esthetic and functionally appealing dental restoration. Thorough and careful planning is required to ensure perfect fit of the patient's restoration.

The use of the materials listed on the following pages enables you to meet any demands and requirements on planning of the dental restoration in a perfect manner.



Bite registration with mushbite
security-bite blue 48

Bite registration with bite blocks
Bite blocks 49

Diagnostic wax up/Set-up
Aesthetic wax veneers 50
Life-Color-Wax 50
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Navigated implant planning
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mini¹SKY 54
X-resin 55

The radiopaque silicone varnish
X-resin flow 57

Fabrication of drilling templates
3D-resin 58

security-bite blue



The solution for perfect bite registration
In order to satisfy the requirements of daily dental routines, bredent involved dentists and dental technicians for the development of the dimensionally stable bite registration material security-bite blue.
Precise bite registration is the key to accurate articulation and occlusion and avoids time-consuming grinding for the user.

- High dimensional stability
- Optimized final hardness (hardness 92 Shore A / 40 Shore D)
- Does not flow into the interdental spaces
- Can be easily processed by cutting or milling
- Neutral taste and odor

Technical data security-bite blue	
processing time	30 sek.
Residence time in the mouth	60 sek.

Assortment

26 pieces
security-bite blue
2 x 50 ml cartridges
12 mixing cannulas, pink
12 contouring tips, wide

REF 580 0002 0



security-bite blue is placed on the arch.



The patient closes the jaws in the occlusion position until the material has hardened.

Accessories:



Dosing device
1 piece
REF 320 0044 0

Mixing cannulas size 1, blue
12 pieces
REF 320 0045 0

contouring tip
wide, 40 pieces
REF 580 0002 3

Bite blocks



Prefabricated wax bite blocks in the shape of rods and jaws and in 4 different degrees of hardness.



medium, red, UJ/LJ
74 pieces
REF 430 0022 0

medium, red, UJ
74 pieces
REF 430 0020 0

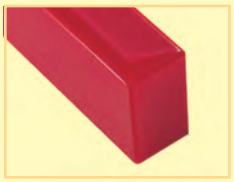
medium, red, LJ
74 pieces
REF 430 0021 0



soft, pink, UJ/LJ
74 pieces
REF 430 0027 0

soft, pink, UJ
74 pieces
REF 430 0025 0

soft, pink, LJ
74 pieces
REF 430 0026 0



The basal profile of the bite blocks allows time-saving adaptation to the base.



hard, yellow, UJ/LJ
74 pieces
REF 430 0017 0

hard, yellow, UJ
74 pieces
REF 430 0015 0

hard, yellow, LJ
74 pieces
REF 430 0016 0



super-hard, white, UJ/LJ
74 pieces
REF 430 0012 0

super-hard, white, UJ
74 pieces
REF 430 0010 0

super-hard, white, LJ
74 pieces
REF 430 0011 0



Bite blocks bw
rods
medium, red
104 pieces
14 x 8 x140 mm
REF 430 0023 0



soft, pink
104 pieces
14 x 8 x140 mm
REF 430 0028 0



hard, yellow
104 pieces
14 x 8 x140 mm
REF 430 0018 0

super-hard, white
104 pieces
14 x 8 x140 mm
REF 430 0013 0

The height and the width of prefabricated bite blocks are suitable for the use on partial dentures.



Prepare situation model in the usual way.



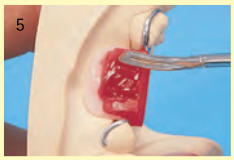
The basal profile of the bite block simplifies adapting on the base plate.



The consistency of the bite blocks allows simple reduction of the height and width using the wax knife.



The prefabricated wax bite block can be easily integrated.



Since additional application of wax to the buccal and lingual area is no longer required, a considerable amount of time and material can be saved.



The high stability and functional processing of the bite blocks ensures precise bite-taking.

Aesthetic wax veneers





Aesthetic wax veneers
Prefabricated wax veneers enable simple working and help to save time. The tooth shade of the wax veneers enable the patient to get an impression of the final restoration.

Assortment

240 pieces
Aesthetic wax veneers
(24 different shapes with 10 individual units each)
REF C13 2401 0

Life-Color-Wax



Tooth-colored wax in two consistencies. Particularly low-shrinkage wax especially developed for the waxing-up technique according to M. A. Polz; hence perfectly suited for visualization.

Life-Color-Wax
25 g
dentine color, medium **REF 510 0080 0**
dentine color, hard **REF 510 0081 0**

100 g
dentine color, medium **REF 510 0079 0**
dentine color, hard **REF 510 0078 0**





Precise application and superior scraping properties are the distinctive features of this wax.

beauty setup



Dentine-colored wax developed for the visio.lign veneering system for fixation of the veneers for the esthetic try-in. Two different colors that can be mixed cover the classic A-D range of shades.

beauty setup
bright, 25g
REF 430 0030 0

dark, 25g
REF 430 0031 0



The veneer is supported with beauty setup wax and set up.



Modelling the set-up using modelling wax pink Standard.

Set-up wax



For setting up and changing the position of acrylic teeth without heating.



Set-up wax asw 4
pink
220 g
REF 430 0157 4



Set-up wax asw 5
pink
220 g
REF 430 0152 0



Set-up wax asw 3
pink
220 g
REF 430 0151 0



Three different sizes of the pink set-up wax allow the individual use.



Thanks to its consistency the set-up wax can be perfectly processed without being heated.

Assortment

Set-up wax asw
pink, 220 g
1 each asw 3, 4, 5
REF 430 0149 0



The set-up wax allows quick adapting on the base plate.



No additional wax is required for flushing of the set-up wax.



Due to the adhesive capacity of the set-up wax, acrylic teeth are fixed prior to waxing on.



Even after waxing on, acrylic teeth can be brought into any individual position.

Modelling wax pink Standard



Modelling waxes in sheets are used for a large number of applications in denture work.

Modelling wax pink Standard sheets.

Two thicknesses and three different qualities provide the technician with individual processing options.

Sheet thickness
1.25 mm
quantity 1000 g
75 x 150 x 1.25 mm
soft, pink **REF 430 0164 3**
medium, pink **REF 430 0164 2**
hard, pink **REF 430 0164 1**

Sheet thickness
1.50 mm
quantity 1000 g
75 x 150 x 1.5 mm
soft, pink **REF 430 0164 6**
medium, pink **REF 430 0164 5**
hard, pink **REF 430 0164 4**



Due to the particular stability of the pink modelling wax sheets, sufficient stability for the base plates is provided.



By rolling up the wax sheets and waxing them to the base plate, acrylic teeth can be set up immediately.



Bite blocks can be easily produced by rolling up and kneading this modelling wax.

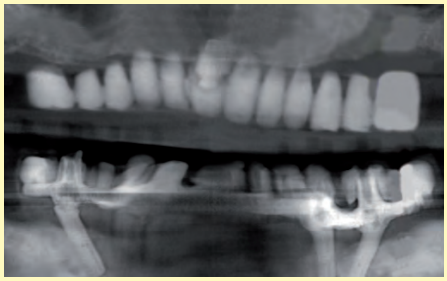


The structure of the pink modelling wax sheets allows easy blocking-out for individual trays.



Even during extended try-in, the original stability of this modelling wax is maintained.

X-resin OPG



X-resin OPG
A special radiopaque resin matched with the requirements of the OPG. In these cases a highly radiopaque material is required to indicate clearly recognizable structures, which facilitates and accelerates the analysis of the X-rays. The cartridge resin can be applied in a precise and economic way to save material and reduce the working time.



Assortment
14 pieces
1 cartridge 50 ml
1 X-connector 10 ml
12 Mixing cannulas size 1, blue
REF 540 0115 8

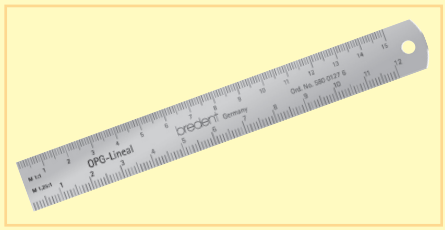
Accessories:



Dosing device
1 piece
REF 320 0044 0

Mixing cannulas size 1, blue
12 pieces
REF 320 0045 0

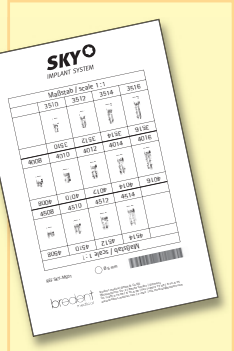
OPG-ruler



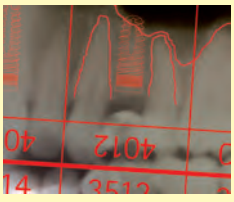
OPG-ruler
transfers the orignal scale of 1.25:1 from the OPG to the implant.
The ruler is made of sterilizable material and can be easily cleaned. OPG radiographs can be measured in the scale of 1.25 : 1.
Converting is no longer required. Thanks to the OPG-ruler, X-ray templates based on implants can be omitted.

OPG-ruler
1 piece
REF 580 0127 6

SKY X-ray template



X-ray template
The suitable X-ray template is put on the X-ray and it can be immediately recognized which implant can be placed. The selection of the suitable implant is facilitated, accelerated and supported.



The X-ray templates for SKY, blueSKY and whiteSKY are placed on the X-ray to see at a glance which implant diameter and implant length are required.

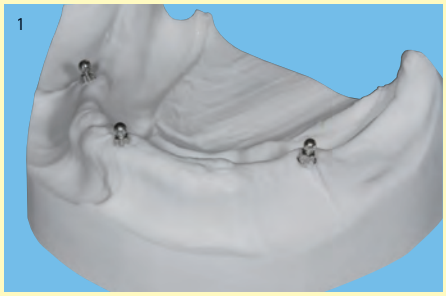
X-ray template blueSKY
Scale 1:1
REF BSKYMS01
Scale 1,12:1
REF BSKYMS12
Scale 1,26:1
REF BSKYMS26

X-ray template SKY
Scale 1:1
REF SKY-MS01
Scale 1,12:1
REF SKY-MS12
Scale 1,26:1
REF SKY-MS26

X-ray template whiteSKY
Scale 1:1
REF SKYMS01C
Scale 1,12:1
REF SKYMS12C
Scale 1,26:1
REF SKYMS26C



The suitable implant could be placed thanks to the X-ray template.
Photos: Dr. Alius / Dr. Gresskowski, Nürnberg



The initial situation
Planning model fabricated using class III stone.



The esthetic set-up
was made with the neo.lign denture teeth from the visio.lign veneering system.



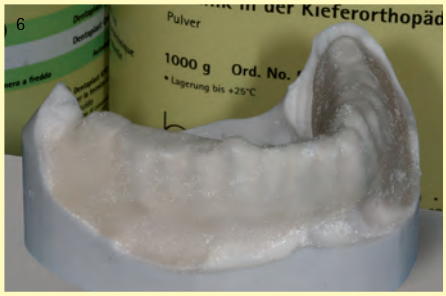
Preparing a matrix
Use Putty soft matrix silicone.



Filling up with X-resin:
Inject X-resin into the matrix, place on the planning material and allow to harden.



Repositioning the X-resin arch
The X-resin arch is removed from the matrix, finished and fixed on the model.



Coating with crystal-clear resin
The X-resin arch is coated with powder resin to ensure stability of the x-ray template. Then it is finished and polished.

Fabricating an x-ray template
The x-ray template is fabricated to visualize the diagnostic set-up/esthetic set-up of the teeth in the x-ray picture (CT/DVT). Subsequent prosthetic/navigated implant planning is based on the scan result.

Materials used

mini[1]SKY page 54
X-resin page 55

mini¹SKY



mini¹SKY Implantat
The mini¹SKY implants provide the basis to transfer and carry out implant placement based on 3D planning in a minimally invasive and reliable manner. Increased wearing comfort is accomplished until the final restoration is inserted. The mini¹SKY Implantate ensure reliable and precise fixation of the scan and drilling templates. As a result, the implants are accurately placed in the planned positions.

mini¹SKY
Length 6 mm, REF m1SKYL06
Length 10 mm,REF m1SKYL10



Initial situation - jaw before treatment.



The required depth in the bone was drilled using the Twistdrill from the SKY OP-Tray .



The the mini¹SKY implants were screwed in.



The SKY-OR55 O-ring is placed on the mini1 SKY implant.



Then the impression is taken.

Accessories:



miniSKY OP-Tray
Clear arrangement of the instruments and drills facilitates the surgical procedure.
REF MSKYOT41



brecision implant heavy
380 ml impression material, blue
5 dynamic mixers
1 bayonet ring, blue
REF 580 BH38 0



brecision implant light
2 x 50 ml cartridges, impression material, orange
10 Mixing cannulas
10 Intra-oral tips
REF 580 BL05 0



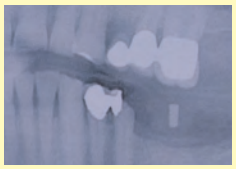
breciform D impression tray - for single use
Starter set
10 upper and lower trays each
Sizes S, M, L and XL
10 breciform D stops, triangular shape
10 breciform D stops, bar shape
REF 580 UOTS S



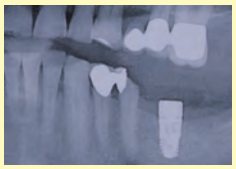
O-ring
6 pieces
REF SKY-OR55

X-resin

Clear vision – for all concerned



Laboratory
Using x-ray templates and reference pins, the relevant prosthetic areas can be visualized in the X-ray picture or in the planning program (software).



Dentist
The dentist is enabled to integrate additional prosthetic information in his treatment plan.



Patient
Implant planning can be outlined to the patient using easily understandable illustrations/pictures and graphics. This way visualization of the necessary treatment steps for patients and their families is achieved.
Patients who understand the therapy will be more willing to spend the money that is necessary.

X-resin
Radiopaque paste material for diagnoses, preoperative planning and prosthetically oriented planning
To ensure long-term success of the implants, exact placement of implants is essential in order to protect them against overloading. Consequently, prosthetic planning should be the first step in the implant planning process. The x-ray picture needs to illustrate prosthetic planning for later implant placement.
The X-resin product family includes radiopaque resins which can be used with every standard planning system to achieve prosthetically oriented implant planning in a simple, safe and fast manner.

- prosthetic planning is carried out on the basis of a situation model
- prosthetic planning is transferred to the planning model with radiopaque teeth
- radiopaque teeth are made from X-resin
- the arch made from X-resin is reinforced using transparent resin in order to be able to provide sufficient stability for the drill sleeves.



X-resin CT, DVT
50 ml cartridge
REF 540 0116 8

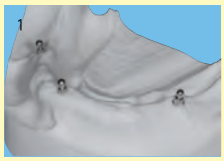
Assortment
14 pieces
1 cartridge 50 ml
1 X-connector 10 ml
12 Mixing cannulas size 1, blue
REF 540 0115 9

X-resin CT DVT has been especially matched with the requirement of CT and DVTs. In these cases a material with reduced radiopacity is required to avoid excess radiation and to recognize clear structures.



X-connector
Bonding agent
10 ml
REF 540 0116 0

Fabrication of x-ray templates with X-resin CT, DVT



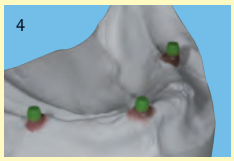
The planning model with the mini1 SKY implants is made from a class III stone.



The esthetic set-up is prepared using the neo.lign denture teeth from the visio.lign system.



The set-up is fixed with Putty soft matrix silicone.



The mini1 SKY planning matrixes are placed on the mini1 SKY implants and undercuts are blocked out with wax.



The Putty soft matrix is filled with X-resin and then placed on the model.



The teeth filled with X-resin are fixed on the model.



The X-resin arch is coated with crystal-clear resin powder.



The finished scan template.



In this case the 3D resin was injected around the X-resin arch and a combination of a scan and drilling templated was fabricated.



In der 3D picture, the scannned teeth are located in the predetermined positions and prosthetically oriented implant planning is carried out.

X-resin

Accessories:



neo.lign denture teeth
anterior and posterior are the consequent supplements within the visio.lign veneering system as far as shade, design and layering are concerned.



mini¹SKY laboratory analog
titanium
REF m1SKYXIA



Dosing device
1 piece
REF 320 0044 0

Mixing cannulas size 1, blue
12 pieces
REF 320 0045 0



brecision Putty soft
matrix silicone
Hardness 65 Shore A
250 ml base (grey)
250 ml catalyst (white)
2 measuring spoons
REF 580 0002 4



Dentaplast KFO

100 g	Powder	**REF 540 0018 3**
100 ml	Liquid	**REF 540 0018 4**
500 g	Powder	**REF 540 0018 5**
500 ml	Liquid	**REF 540 0018 6**
1000 g	Powder	**REF 540 0018 7**
1000 ml	Liquid	**REF 540 0018 8**



Haptosil D
silicone for keys
Hardness 90 Shore A
Components A and B
each 1300 g
REF 540 0118 0



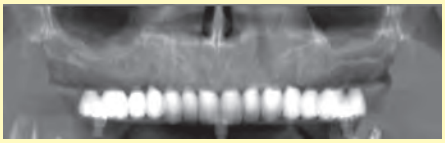
mini¹SKY planning matrix
3 pieces
REF m1SKYPLM

X-resin flow



Radiopaque silicone varnish for diagnoses, preoperative planning and prosthetically oriented planning
X-resin flow allows to fabricate an x-ray template from the existing denture in just a few minutes.

This radiopaque silicone varnish is applied to the teeth of a full denture and thinly spread using a disposable brush.
Allow the material to harden for a short moment – that's it.



X-resin flow is perfectly visible after the scan (DT/DVT).

The contours of the teeth can be clearly recognized in the x-ray picture (DVT or CT) and thus prosthetically oriented alignment of the implants in the implant planning software is enabled. This facilitates planning considerably. If X-resin flow is applied to the basal area, the thickness of the mucosa can be clearly determined in the x-ray picture. The silicone varnish can be easily removed after the taking the x-ray.



X-resin flow
X-resin flow is supplied in the double-mix cartridge to ensure a perfect mixing result and fast application.
50 ml
REF 580 0115 9

Changing the existing denture into a scan template.



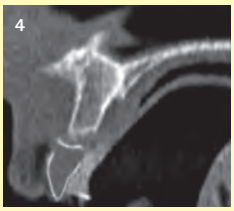
X-resin flow is applied to the dry and clean denture.



X-resin flow silicone varnish is evenly spread using a brush.



X-resin flow is applied to the basal area, the denture is inserted and pressure is exerted to achieve uniform distribution of the silicone varnish. This way the mucosal thickness can be determined.



The contours of the radiopaque silicone varnish X-resin flow can be clearly recognized.

Accessories:

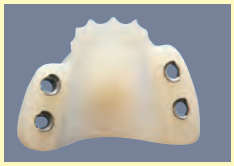


Dosing device
1 piece
REF 320 0044 0

Mixing cannulas, size 1, blue
12 pieces
REF 320 0045 0

3D-resin

Perfect View - For all concerned



Laboratory
Reliabe and simple processing of 3D-resin enables the laboratory to prepare precise drilling templates in an uncomplicated manner.



Dentist
Highly accurate guidance of the drill is ensured by the use of 3D-resin drilling templates. Slipping on the ridge is avoided and hence the implant is placed precisely in accordance with the criteria.



Patient
Overloading is avoided thanks to careful placement of the implants. Consequently, reliable and comfortable wearing of the implant-supported restoration is ensured for the patient.

Special resin for the fabrication of drilling templates in implant dentistry.
Drilling templates are indispensable tools for accurate placement of implants in implant dentistry. One of the key prerequisites during surgery is the sterilization of the surgical instruments which naturally also includes the drilling template. 3D-resin was developed especially for this purpose can be sterilized in the autoclave.

- Self-curing resin in the cartridge
- Heat-resistant and dimensionally stable up to 138° C
- Easy to use and to process
- Short setting time

3D-resin
is a two-component, self-curing special resin supplied in a cartridge which retains dimensional stability if it is heated up to 138° for a short period. 3D-resin is used to fabricate drilling templates in implant dentistry.



3D resin

3D-resin
50 ml cartridge
REF 540 0116 9

Assortment
14 pieces
1 cartridge 50 ml
1 X-connector 10 ml
12 Mixing cannulas size 1, blue
REF 540 0116 4



X connector

X-connector
Bonding agent
10 ml
REF 540 0116 0



1 The planning model is insulated with Isoplast ip.



2 The 3D-resin drilling template material is applied to the model.



3 A piece of cling film is placed on and the material is evenly spread with the fingers.



4 The drilling template is finished in the usual way.



5 The model is placed on the transfer table, the coordinates are set and the holes are drilled.



6 The transfer pin is used to insert the drill sleeves into the drill holes; then SERACOLL UV is used to glue the sleeves.

3D-resin

Accessories:

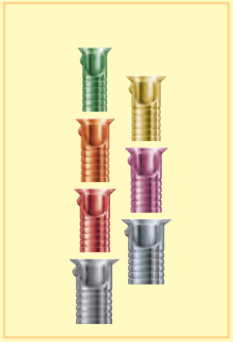


Isoplast ip
750 ml
REF 540 0101 9



Dosing device
1 piece
REF 320 0044 0

Mixing cannulas size 1, blue
12 pieces
REF 320 0045 0

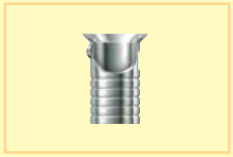


SKYplanX drilling sleeves
5 pieces each

Ø 2.39 **REF SXBHI239**
Ø 3.09 **REF SXBHI309**
Ø 3.33 **REF SXBHI333**
Ø 3.59 **REF SXBHI359**
Ø 3.83 **REF SXBHI383**
Ø 4.09 **REF SXBHI409**
Ø 4.33 **REF SXBHI433**



SERACOLL UV
light-curing wax adhesive
2 x 3 ml
2 dosing dishes
REF 540 0115 1



SKYplanX Guiding sleeve
5 pieces each

Ø 4.53
REF SXBHM453

Ø 5.55
REF SXBHM555



SKYplanX Sleeve drill
1 piece each

for sleeve Ø 4.53
REF SplanX47

for sleeve Ø 5.55
REF SplanX55



SKYplanX Sleeve seating tool
1 piece each
Ø 2.39 **REF SplanX52**
Ø 4.53 **REF SplanX46**
Ø 5.55 **REF SplanX51**
SKY Analogs **REF SplanX53**

NEW OPPORTUNITIES FOR SUCCESS

FURTHER TRAINING AT AND WITH THE BREDENT GROUP ACADEMY



We strive to be amongst the best. In this spirit, we have reviewed our course programme and the results are now being introduced under the bredent group academy banner.

The bredent group academy course programme is aligned to the strategic direction of the bredent group. On the one hand, we have the part that is in line with the market, oriented towards tailored solutions to meet the needs of the market. Such solutions have been developed according to the specific segment. By contrast, there is the market-oriented segment. This is geared towards a changing market, such as economic cycles and trends.

However, it is far more important to recognise users' wishes from the outset. This means being intuitive to what users want and need, and knowing what the future holds - in terms of materials, systems and treatment concepts. Only this way can we as a manufacturer ensure that our company progresses and understands the associated obligations to inform, support and help you, as our client, on the path to commercial success.

Further training is a key component of this duty, since the cornerstone for new technology and a smooth transfer of knowledge are being laid. The instructors are the life of this course – all of them experts in their field – equipped with the vision and the necessary drive to develop innovations and put them into practice. This programme unites these visions and appeals to those who never cease to develop themselves further.

The individual development and optimisation of your practice, your laboratory and your marketing has a decisive effect on realising success in your practice or laboratory, your income and therefore your abilities, ideas, wishes and dreams.

A new range of events in the areas of patient communication, hygiene, conflict management, practice marketing, data protection and social media, in addition to the exciting beginners' and improvers' courses in implantology and dental technology, can help you become even more successful. Not only is further training at the forefront of your professional qualifications, but so too is positioning your business as a successful brand on the market.

Join us and strive to be amongst the best – for the benefit of you and your patients!

Scan this QR code with your smartphone!

Find out more about our course programme at www.bredent.com.

The temporary restoration is the first restoration the patient comes into contact with. Therefore the material used for it should have excellent quality to be accepted by the patient.

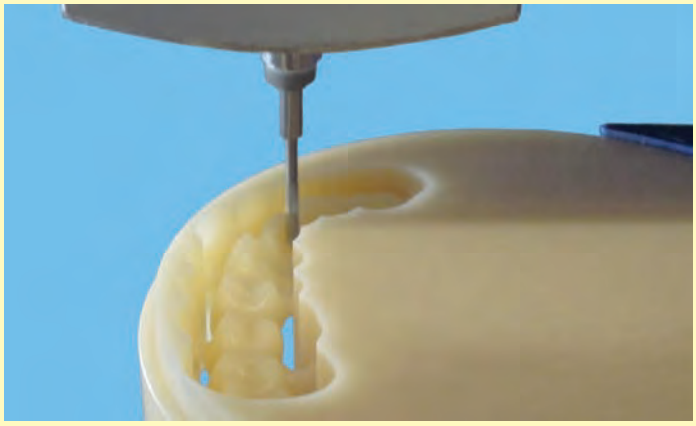
These temporary materials form the basis of the future permanent restoration.

Suitable materials for the fabrication of interim dentures for hypersensitive patients can be found in chapter 10.





Photo: Dr. Frank und Dr. Steffen Kistler, Dr. Georg Bayer, Landsberg am Lech



The interim denture
System steps....63
Qu-base UV....64
Thermoplastic clasp....66

The temporary
System steps....67
top.lign breformance....68

The milled temporary
System steps....71
breCAM.resin milling blanks....72
breCAM.cutter....73
Exakto-Rock S....74
Fluid-Rock....74

IMPLANT PROSTHETICS

ONE-STOP INTERDISCIPLINARY COMPETENCE – WHAT THE BREDENT GROUP STANDS FOR



In 1974, the approach of the bredent group was to ensure that they manufactured more than just a few products for lasting success for customers.

With comprehensive products, system solutions and treatment concepts for dental technology and dentistry, which are interconnected in a professionally competent manner, the bredent group is amongst the few companies that are held in high esteem equally by both groups.

In close cooperation with reference laboratories and practices, well-matched, patient-centred products, system solutions and treatment concepts are developed, which can be implemented efficiently as well as rapidly in the laboratory and the practice.

The positive effect of ground-breaking development!



The initial situation
A class III stone was used to fabricate the model. The undercuts were blocked out with Biotec blocking out wax, insulated with Isoplast lp and then the clasps were attached.



Qu-base UV plate material is adapted. The high stability of Qu-base UV plate material enables convenient working and helps to save time.



Setting up the teeth
neo.lign teeth from the visio.lign system are used for setting up the teeth. Polymerization is carried out in the bre.Lux Power unit in a way to save time.



Adding up gingiva
Qu-resin pink in the double-mix cartridge enables controlled and efficient application.



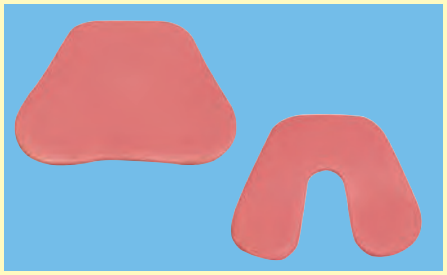
Processing and polishing
A wide range of tungsten carbide tools and polishing brushes ensure fast processing and polishing.

Thanks to the use of Qu-base UV, laborious and time-consuming fabrication of interim dentures is now a thing of the past. Qu-base UV allows efficient and fast working.

Materials used

Qu-base UV page 64
Thermoplastic clasp page 66

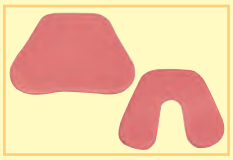
Qu-base UV



Qu base UV

is the new, light-curing plate material for fast fabrication of temporary dentures and drilling tem-plates.

- 50 min. time advantage compared to conventional fabrication of temporary dentures
- prefabricated plates in upper and lower jaw shapes eases the make of temporary dentures and drilling templates
- no wax set-up, no silicone key and no pressure pot required anymore, saves material and money
- excess material is used for teeth setup hence allowing for economical work



Qu-base UV
7 x UJ / 7 x LJ
REF 540 0117 1



Qu-base UV
14 x UJ
REF 540 0117 2



Qu-base UV
14 x LJ
REF 540 0117 3

Indication



Clasp retained temporary dentures



Implant retained temporary dentures



Addition of temporary dentures



Repairing of a temporary dentures



Drilling-template manufacturing

Fabrication of an interim denture with Qu-base UV



The prefabricated Qu-base UV upper plate is pressed on the model (insulated with Isoplast ip) and cut out. The thermoplastic clasps are attached.



Excess of Qu-base UV plate is placed on the ridge to set up the teeth. A layer thickness of 3 mm must not be exceeded.



Prior to the set-up, the neo.lign denture teeth are sandblasted with 110 µm aluminium oxide, a thin coat of visio.link or Qu-connector is applied and activated in the bre.lux Power unit (light curing unit) for 90 sec.



Once the teeth have been set up, the model is placed into the bre.lux Power unit (light curing unit) and polymerized. To keep polymerization shrinkage on a minimum level, the following procedure is recommended:

1. 90 sec. with 20% power
2. 90 sec. with 70% power
3. 90 sec. with 100% power
4. Remove the denture form the model and polymerize the bottom side for 90 sec. with 100 % power.



Qu-resin pink is used to apply the missing gingival proportions. The dispersive layer of Qu-base UV must not be removed before applying Qu-resin or Qu-connector or visio.link must be applied thinly and polymerized in the light curing unit for 90 sec before Qu-resin is applied.



The use of tooth-colored thermoplastic clasps leads to a better esthetic appearance.

bredent group

Telephone (+49) 0 73 09 / 8 72-4 40

Qu-base UV

Fabrication of a drilling template with Qu-base UV



Model with mini¹SKY lab implants for retaining the drilling template.



Attach metal matrix housing, block out and insulate with Isoplast ip.



Press Qu-base UV against the metal matrixes and cure for 90 sec.



Adapt UV plate, cut out and replace into SKY5X transfer table.



Perforate the plate at the point where the drill sleeve is to be placed. Coat with Qu-base UV and carry out light curing (local) to fix the drill sleeve. This step must be repeated for additional drill sleeves.



Once all drill sleeves have been attached, the model is placed into the bre.lux Power unit (light curing unit) and polymerized. To keep polymerization shrinkage on a minimum level, the following procedure is recommended:
1. 90 sec. with 20 % power
2. 90 sec. with 70 % power
3. 90 sec. with 100 % power
4. Remove the denture form the model and polymerize the bottom side for 90 sec. with 100% power.

Asseccories:



Biotec
blocking out wax
Special wax for blocking out undercuts. No discoloration on the plaster model after boiling out or cleaning with steam.
28 g, pink
REF 510 0061 5



Isoplast ip alginate based and insulates plaster against resin whilst creating a highly lustrous resin surface.
750 ml
REF 540 0101 9



neo.lign
anterior and posterior are the logical addition to the visio.lign veneering system (see chapter 9).



bre.Lux Power Unit
- LED technology ensures extended service life
- 370 - 500 nm covers the entire wavelength range and the hand lamp is also suitable for the same wavelength range
- fixation/prepolymerization/intermediate and final polymerization with a single unit directly at the working place
- high capacity for 2 models, perfectly and evenly illuminated

REF 140 0097 0



Qu-resin
is a quick-setting, self-curing denture repair resin in two colors (pink / dentin). It is suitable for direct and indirect use.

Qu-resin pink
Assortment 14-pieces
1 Cartridge 50 ml
1 Qu-connector 10 ml
12 self mixing tips
Size 1, blue
REF 540 0116 1

Qu-resin dentin
Assortment 14-pieces
1 Cartridge 50 ml
1 Qu-connector 10 ml
12 self mixing tips
Size 1, blue
REF 540 0116 2

Qu-resin pink
50 ml Cartridge
REF 540 0116 5

Qu-resin dentin
50 ml Cartridge
REF 540 0116 6

Tools for perfect surface processing can be found in chapters C and D.

Thermoplastic clasp

1. New fabrication of a clasp denture



Invisible clasp in different tooth colors.
Aesthetically appealing clasp for a happy smile.



Thermoplastic clasp, left
(2./4. quadrant)
Package cont. 8 pieces
REF 430 00LA 2
REF 430 00LA 3
REF 430 00LB 2
REF 430 00LB 3



Thermoplastic clasp, right
(1./3. quadrant)
Package cont. 8 pieces
REF 430 00R**A 2**
REF 430 00R**A 3**
REF 430 00R**B 2**
REF 430 00R**B 3**

Available shades:
A2, A3, B2, B3



In the visible area metal clasps are not cast together with the CoCr structure. Attach metal clasp only in areas that do not affect the esthetic appearance.



Select the suitable color of the prefabricated clasp profile and carry out coarse grinding using a bur.
Fix the clasp profile in Translock, heat



and press the clasp against the tooth mould. Grind the adapted clasp to obtain the final shape.



Each clasp design can be produced individually.

2. Repair or extension of a clasp



Time-saving fabrication of an esthetic clasp.



Invisible, thanks to a matching tooth color - this way the patient's self esteem is increased.

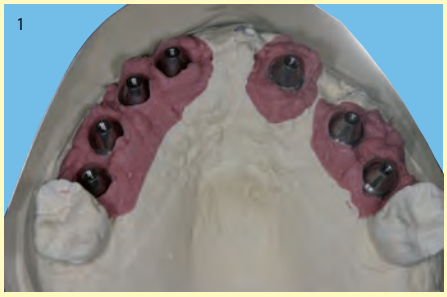


Thermo-Pen
1 piece
REF 110 0147 0

Accessories:



Transblock
500 g
REF 540 0035 0


1

The initial situation
Fabrication of the model with a class III stone. The gingival mask is prepared with Multisil-Mask soft.


2

Setting up the teeth
Before setting up the novo.lign veneers from the visio.lign system, the model is insulated with Isoplast ip. The titanium prosthetic caps are shortened correspondingly.


3

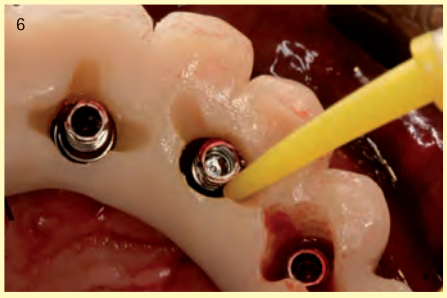
A haptosil D matrix is used for fixation of the set-up.


4

Covering the prosthetic caps
Silicone tubes are attached as spacers to all prosthetic caps except of one in order to lute them in situ without any stress later on. Then a suitable shade of top.lign breformance is used to fill the matrix.


5

Processing and polishing
A wide range of tungsten carbide tools and polishing brushes ensure fast finishing and polishing.


6

Bonding in the patient's mouth
Qu-resin dentin is used for stress-free bonding in the patient's mouth.

top.lign breformance is used to fabricate temporary crowns and bridges in various tooth shades. It can be used for implant-supported temporaries thanks to its elasticity and high fracture strength.

Materials used

top.lign breformance page 68

top.lign breformance



top.lign breformance is a tooth-colored, hot- and cold-curing (top.lign hot / top.lign cold) crown and bridge resin for temporary restorations. top. lign cold features good flow properties and is distinguished by its elasticity, facture strength and shade stability.





top.lign breformance liquid heat
50 ml
REF bre lhq0 1



top.lign breformance liquid cold
* 50 ml
REF bre lcq0 1
100 ml
REF bre lcq0 2

*Assortment

13 pieces



1 x 50 ml
top.lign breformance liquid heat
1 x 50 ml
top.lign breformance liquid cold
separating liquid
25 g Polymer each
REF bre set0 1

Cervical 1	Cervical 2	Enamel 1	Enamel 2	top.lign breformance Polymer		REF
				1 neck material Cervical1	*25 g 90 g	bre CV10 1 bre CV10 2
				1 neck material Cervical2	*25 g 90 g	bre CV20 1 bre CV20 2
				1 incisal material Enamel 1	*25 g 90 g	bre EN10 1 bre EN10 2
				1 incisal material Enamel 2	*25 g 90 g	bre EN20 1 bre EN20 2
✓		✓		1 dentine material A1	25 g 90 g	bre DA10 1 bre DA10 2
✓		✓		1 dentine material A2	*25 g 90 g	bre DA20 1 bre DA20 2
✓		✓		1 dentine material A3	*25 g 90 g	bre DA30 1 bre DA30 2
	✓		✓	1 dentine material A3,5	*25 g 90 g	bre DA35 1 bre DA35 2
	✓		✓	1 dentine material A4	25 g 90 g	bre DA40 1 bre DA40 2
✓		✓		1 dentine material B2	25 g 90 g	bre DB20 1 bre DB20 2
✓		✓		1 dentine material B3	*25 g 90 g	bre DB30 1 bre DB30 2
✓		✓		1 dentine material C2	*25 g 90 g	bre DC20 1 bre DC20 2
	✓		✓	1 dentine material D3	*25 g 90 g	bre DD30 1 bre DD30 2
				1 transparent material	*25 g 90 g	bre tran 1 bre tran 2

Shades according to VITA classical / Vita is a registered trademark of Vita Zahnfabrik, Bad Säckingen

Clinical use in implantoloy with SKY fast & fixed and top.lign cold



Model with screwed-on SKY fast & fixed prosthetic copings made of titanium.



novo.lign veneers were used for the set-up. The set-up is retained using the haptosil D matrix.



The novo.lign veneers were sandblasted with 110 µm aluminiun oxide and placed in the matrix.



Before attaching the matrix, silicone tubes are placed on all prosthetic caps except of one.



The bridge was lined and the non-coated prosthetic cap has been fixed in place (polymerized).



The bridge was finished and space was created for direct bonding of the remaining prosthetic copings.



The remaining prosthetic caps are screwed on the abutments and bonded stress-free in the patient's mouth using Qu-resin dentin.



Ii is essential to polish the entire bridge structure to high gloss to avoid accumlation of plaque.



The completed temporary bridge in the patient's mouth.

Photos: Dr. Frank and Dr. Steffen Kistler, Dr. Georg Bayer and DT Stephan Adler, Lands-

bredent group

top.lign breformance

top.lign breformance hot

Easy to use heat-curing resin for temporary crown and bridge technology. Monomer reduced production is possible with breformance LiquidHeatCuring.



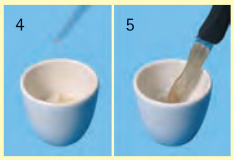
Embed the model so that the cover of the mould can be easily separated.



Heat the mould with boiling water to facilitate opening. To prevent the dies from fracturing, open the two halves of the mould carefully. After opening, boil out the remaining wax.



Deburr any sharp edges. Use Isoplast ip (REF 540 0101 9) to insulate the plaster while it is still warm. Make sure that no puddles form behind the dies. Isoplast ip facilitates removal after the polymerization process.



Mix top.lign in the ratio 2:1 (powder:liquid). After selecting the dentin shade, the powder is filled into a small ceramic pot and the corresponding quantity of liquid is added. After mixing, the resin needs to swell for approx. 6 minutes.



The expanded resin is now inserted into the mould taking care to avoid bubble formation. More resin is inserted than necessary so that the resin is compressed during pressing.



For the trial pressing a foil is placed between the two mould halves. After the trial pressing, individual treatment can begin.



The enamel area is cut back using a sharp instrument. The pre-reacted enamel resin is now added and a new trial pressing is made. After checking the trial pressing, the mould is closed and heated.



The completed bridge with layered incisal edge. If the shade needs to be modified, individualization can be easily carried out with top.lign cold.

Accessories:



SKY fast & fixed Laboratory analog, titanium
REF SKYFF0LA



SKY fast & fixed Prosthetic cap, titanium
REF SKYFFPKT

In bridge restorations with SKY fast & fixed, the prosthetic cap is used as a basis for the temporary restoration to enable fast and simple fabrication. The prosthetic cap - transversal screw retention - can also be used for the temporary restoration. A silicone tube is enclosed to each SKY fast & fixed titanium prosthetic cap.



Set
2 x 50 ml Multisil-Mask soft
24 mixing cannulas
10 ml Multisil-Sep
REF 540 0104 1



Isoplast ip
750 ml
REF 540 0101 9



Set-up wax asw 3
pink, 220 g
REF 430 0151 0

Set-up wax asw 4
REF 430 0157 4

Set-up wax asw 5
REF 430 0152 0



Modelling wax pink standard
Sheet thickness
1.50 mm, 1000 g
75 x 150 x 1.5 mm

soft, pink
REF 430 0164 6

medium, pink
REF 430 0164 5

hard, pink
REF 430 0164 4



neo.lign
anterior and posterior are the logical addition to the visio.lign veneering system. (see chapter 9)



haptosil D
Addition-curing kneading silicone with a Shore A hardness of 90 for the fabrication of stable and exact keys and models. For reliable fixation of the set-up and the teeth in the key.
Component A and B, 1300 g each
REF 540 0118 0

Accessories:



Qu-resin
is a quick-setting, self-curing denture repair resin in two colors (pink / dentin). It is suitable for direct and indirect use.

Qu-resin pink
Assortment 14 pieces
1 cartridge 50 ml
1 Qu-connector 10 ml
12 self mixing tips Size 1, blue
REF 540 0116 1

Qu-resin dentin
Assortment 14 pieces
1 cartridge 50 ml
1 Qu-connector 10 ml
12 self mixing tips Size 1, blue
REF 540 0116 2

Qu-resin pink
50 ml cartridge
REF 540 0116 5

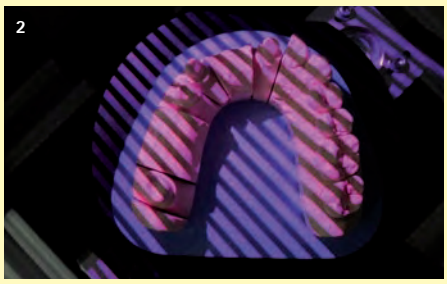
Qu-resin dentin
50 ml cartridge
REF 540 0116 6

Tools for perfect surface processing can be found in chapters C and D.

bredent group



The initial situation
Sawcut model fabricated with Exakto-Rock S



Der Scan
The model is scanned.



The design
The bridge is designed on the computer - in this case, fully anatomical.



The milling process
The milling system mills the bridge from the breCAM.resin milling blank.



The result
The fully anatomical, milled bridge on the model.

breCAM.resin are PMMA milling blanks for the fabrication of high-quality long-term temporaries in the basic colors A, B and C as well as transparent for splints. The good mechanical values also allow the use of the milled temporaries for fully anatomical restorations.

Materials used

breCAM.resin milling blanks	page 72
breCAM.cutter	page 73
Exakto-Rock S	page 74
Fluid-Rock	page 74

breCAM.resin milling blanks

breCAM-Blanks for the CNC milling technique
High-quality basic materials provide ideal preconditions for high-quality restorations.

- Blanks with a diameter of 98 mm, suitable for all standard milling machines
- The integrated step ensures reliable and simple fixation of the blanks in the holder
- Different heights offer more flexibility, hence also suitable for higher implant restorations
- Different thicknesses of the blanks guarantee efficient and faster milling
- High-quality resin blanks for temporary restorations
- Wax blanks with particularly high edge stability allow high milling speeds



		16 mm	20 mm	24 mm
breCAM.resin A 1 blank	REF	**540 0201 0**	**540 0201 1**	**540 0201 2**
breCAM.resin B 1 blank	REF	**540 0201 3**	**540 0201 4**	**540 0201 5**
breCAM.resin C 1 blank	REF	**540 0201 6**	**540 0201 7**	**540 0201 8**
breCAM.resin transparent 1 blank	REF	**540 0201 9**	**540 0202 0**	**540 0202 1**

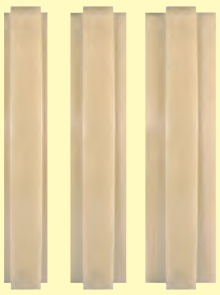
Scale =
1:1
Ø 98 mm



PMMA blanks for high-quality long-term temporaries in the basic colors A, B and C and as transparent blanks for splints. Thanks to a special manufacturing process, the blanks feature superior material properties, which result in increased stability of the restoration.

Technical data - breCAM.resin:

Modulus of elasticity:	2760 MPa
Flexural strength:	114 MPa
Elongation at break:	7 %



16 mm 20 mm 24 mm

The integrated step of the blanks enables safe fixation in the holder. The different thicknesses of the blanks provide high flexibility in the use and hence the blanks can also be used for higher implant restorations.



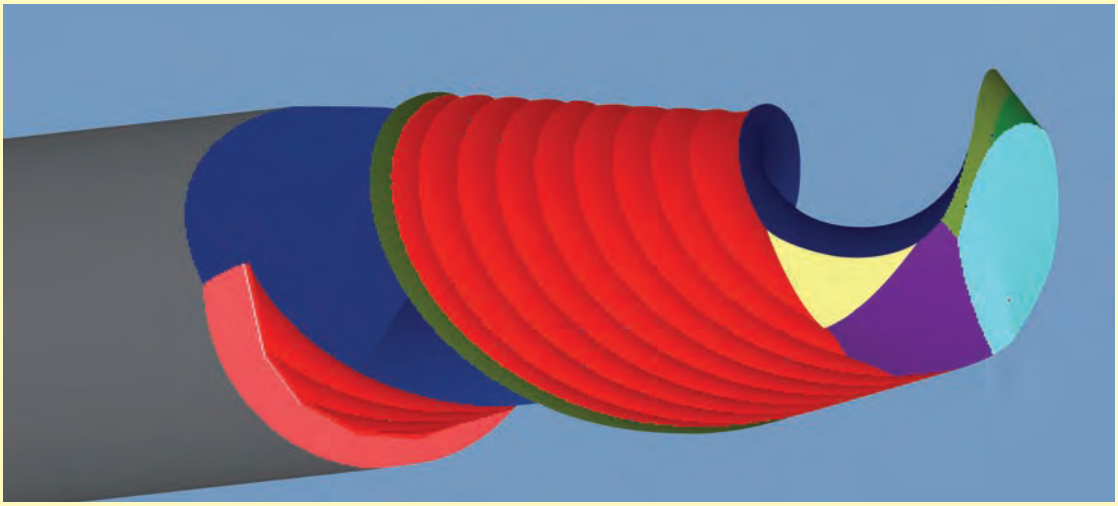
breCAM.resin
The use of breCAM.resin as substructure material - veneered with visio.lign veneers - enables economic fabrication of long-term temporaries. Economic fabrication of anatomical temporary restorations is also possible. The high surface density of breCAM.resin guarantees extremely low plaque affinity.

breCAM.cutter



The breCAM.cutter
was developed especially for dry processing of PMMA and PEEK in CNC milling systems. Thanks to its patented geometry, it can also be used for milling thermoplastic materials, which have a tendency to rapid smearing and clogging of the tool, without cooling with water.

specially desigend for dry-milling purpose, usable for wet milling as well.
Cutter stays clear, even by milling materials with the tendancy clogging the bur



- Patented blade geometry, avoiding overheating
- Single blade cutter
- Usable for popular machines
- Enhanced cutter for dry-milling (thermoplastic material, PEEK,wax)

REF	Manufacturer	Type	Shank diameter	Diameter of working section	Total length	Working section length with chip channel
breCAMX47	Wieland, Imes Icore, Coritec, 340i, 450i, 440i	Radius cutter	3.0	1.0	38.2	15.0
breCAMX48	Wieland, Imes Icore, Coritec, 340i, 450i, 440i	Radius cutter	3.0	2.0	38.2	15.0
breCAMX49	3M Espe, LAVA Form System 400, 500, Charly Robot	Radius cutter	3.0	1.0	38.0	15.0
breCAMX50	3M Espe, LAVA Form System 400, 500, Charly Robot	Radius cutter	3.0	2.0	38.0	15.0
breCAMX53	Roland DWX 40, DWX 50, Calidia, TDS, DMG U-Serie, Yenadent, Orgien	Radius cutter	4.0	1.0	50.0	15.0
breCAMX54	Roland DWX 40, DWX 50, Calidia, TDS, DMG U-Serie, Yenadent, Orgien	Radius cutter	4.0	2.0	50.0	15.0
breCAMX67	VHF, FinoCAM, Jeneric Pentron, Schütz, Trendgold	Radius cutter	3.0	1.0	34.0	15.0
breCAMX69	VHF, FinoCAM, Jeneric Pentron, Schütz, Trendgold	Radius cutter	3.0	2.0	34.0	15.0

Exakto-Rock S

Exakto-Rock S is a synthetic super-hard class IV stone with distinctive thixotropy and improved flow properties and is free from formaldehyde.



Reduced expansion is completed after 2 hours and is only 0.08 %. As a result, highly accurate impressions are enabled and precision-fit restorations are ensured. Moreover, thanks to optimized reflection of light, Exakto-Rock S is suitable for scanning and available in brown and ivory.

- fomaldehyde-free stone ensures safe processing and can be used for the fabrication of holistic dentures without any problem
- synthetic components ensure consistent quality and enable the fabrication of precision-fit models
- improved flow characteristics facilitate pouring of several impressions
- optimized reflection of light thanks to special dye pigments reduce reworking/adjustments in the CAD system



Color – brown:

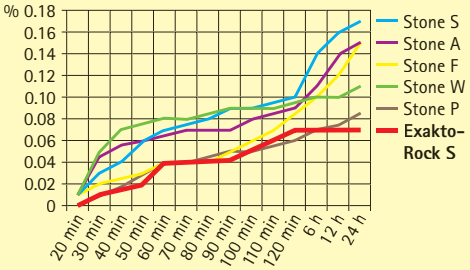
1 x 2 kg	**REF 570 0SB5 2**
5 x 2 kg	**REF 570 0SB5 1**
10 x 2 kg	**REF 570 0SB5 0**



Color – ivory:

1 x 2 kg	**REF 570 0SE5 2**
5 x 2 kg	**REF 570 0SE5 1**
10 x 2 kg	**REF 570 0SE5 0**

Expansion of various other stones



Fluid-Rock

Fluid-Rock is a smoothly flowing class IV super-hard stone to prepare bases of arches.



The light-blue color can be easily combined with all colors for the arch. The extended processing time allows to pour several bases at the same time. The thin consistency results in perfect flow characteristics and allows to obtain bubble-free models.

Color – blue:

1 x 2 kg	**REF 570 0FB5 2**
5 x 2 kg	**REF 570 0FB5 1**
10 x 2 kg	**REF 570 0FB5 0**

Technical Data – Fluid-Rock

Color	blue
Mixing ratio	100 g / 25 ml distilled water
Processing time	approx. 6 min at 18° to 20° C
Setting time (Vicat time)	approx. 11 min at 18° bis 20° C
Comp. strength aft. 1 hr	48 N/mm²
Comp. strength aft. 24 hrs	55 N/mm²
Setting expansion	< 0.06 % (no further expansion after 2 hours)

Processing in the ecovac unit:
Vacuum level 1, mixing speed: 390 rpm

Tools for perfect surface processing can be found in chapters C and D.

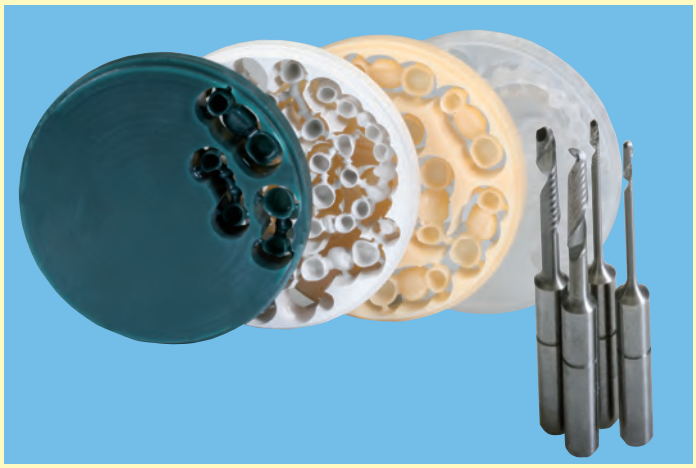
In the area of digital manufacturing, it is important to achieve optimal and reproducible results using system components of the "digital workflow" that are attuned to each other.

This includes conventional CAD software, scanners and CNC machines and the corresponding grades of materials and the tools and milling strategies optimised for them.

It also encompasses conceptual design, the assembling of independent, open hardware and software components in accordance with an individual production design and the possibility to expand these further in the future.

All that means that the choice and decisions made for CAD/CAM systems today are subject to questions of system compatibility, open interfaces and a free choice of materials from multiple manufacturers for processing in the system.

In future, the communication accompanying an order, the involvement of physicians and a free exchange of suitable documentation will be increasingly important for planning and manufacturing. The "digital workflow" will consequently be supplemented by digital production and communication management.



CAELO system group CAD/CAM
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e.cad 77
e.scan 77

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breCAM.resin milling blanks 80

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breCAM.cutter 81

CAD/CAM plasters
Exakto-Rock S 82

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The digital system group CAD/CAM. Open system range of products including hardware and software components. Modular construction; independent, compatible with other companies' software and hardware for expansion.



CAELO is a digital product range that is constantly being developed and improved. All solutions from the CAELO system group generally work with open hardware and software products from other manufacturers on the basis of processing and output of open STL files.

To let you know about the latest developments in the CAELO family, the corresponding product descriptions are available on our website:

www.caelo-dental.net



Is a dental management and communication application, installed locally or controllable via the web using a web browser for the most important functions.

e.order is the optimal and sensible addition to the "digital workflow" to coordinate communication and data exchange between all persons and parties active in the planning or manufacturing process.
REF CAE T000 0

e.order user groups

Physicians
and other specialists involved in further processing in the areas of dental applications, including research and development.

- For exchange/communication in the area of diagnostics and treatment
- To discuss current patient cases and seek other expert opinions where necessary
- To define and implement shared actions, developments, treatments and manufacturing processes (digital order slip)
- To monitor and guide these through the implementation process
- Interested parties can expand the diagnostic circle at any time and invite particular specialists/participants
- Documents and data prepared in the cloud can be used for evaluation, processing, change and addition
- Documents saved in the cloud (in accordance with the German Medical Products Act) (flexible office) allow access independent of location to all possible digital data formats and contents

Dental technicians
stay connected to their clients during the whole of the order's manufacturing process and can access centrally prepared and saved data and communication tools together or individually with the location-independent and system-independent software e.order.

- Network with your clients and partners
- Communicate using independent, free software
- Digital data (STL, DICOM, PDF, WORD, TXT, etc.) pertaining to an order or case can be made available to the user groups.
- The manufacturing process can be monitored and guided from any place at any time, independent

of the system (communication tools)

Milling centre/service providers and dental service receivers
are offered various functions by e.order to support the digital manufacturing process:

- Brokerage function, choice of required service providers by manufacturing process (milling, polishing, laser sintering, stereolithography)
- Installation and allocation of an "order thread" for the purpose of monitoring the manufacturing process and documentation exchange of associated communications
- Using additional functions, e.order supports the digital workflow in the area of communication/ monitoring, through threads, push e-mail, SMS, Skype
- ".dcm-.stl Converter", converts a .dcm file into an open .stl format
- "Digital order slip" for quick digital placing of orders by your dentist, with accompanying digital documents as an attachment in the cloud or threads
- Integrated DICOM Viewer and STL Viewer
- Cloud-storing, central data storage in accordance with MPG, also available as web-based service



"Just right" is the motto of our modular CAD system.

Determine exactly what you need. No more, no less!

Is your weak point in crowns, bridges, telescopic and 2-component restorations, or do you require additional functionality for implantology, attachments, bridges or the visio.lign veneer system?

Our business model is visionary: a modular CAD, with selectable or de-selectable functionality and structural modules, a system that adapts itself to you and your needs and grows with them.

Naturally, e.cad has already been linked to e.order. As a logical consequence of its user-friendly operation, e.order controls the scanner (e.scan) and conveys the model scan directly to e.cad for further processing.
REF CAE C000 0

escan



Optimally adjusted for our system, e.scan from bredent is our open STL scanner.

An unbeatable price-performance relationship:
Dental scanner for the 3D scanning of physical plaster models. Our high-speed scanner offers accuracy and precision, both of which are required for full bridges and implant bridges. Full integration with e.scan software and e.order for the optimal "scan – construction – work" process.
REF CAE S000 0

breCAM.wax milling blanks

breCAM blanks for the CNC milling technique
High-quality basic materials provide perfect prerequisites for top-quality dental restorations.

- Blanks with a diameter of 98 mm, suitable for all standard milling machines
- The integrated step ensures reliable and simple fixation of the blanks in the holder
- Wax blanks with particularly high edge stability allow high milling speeds



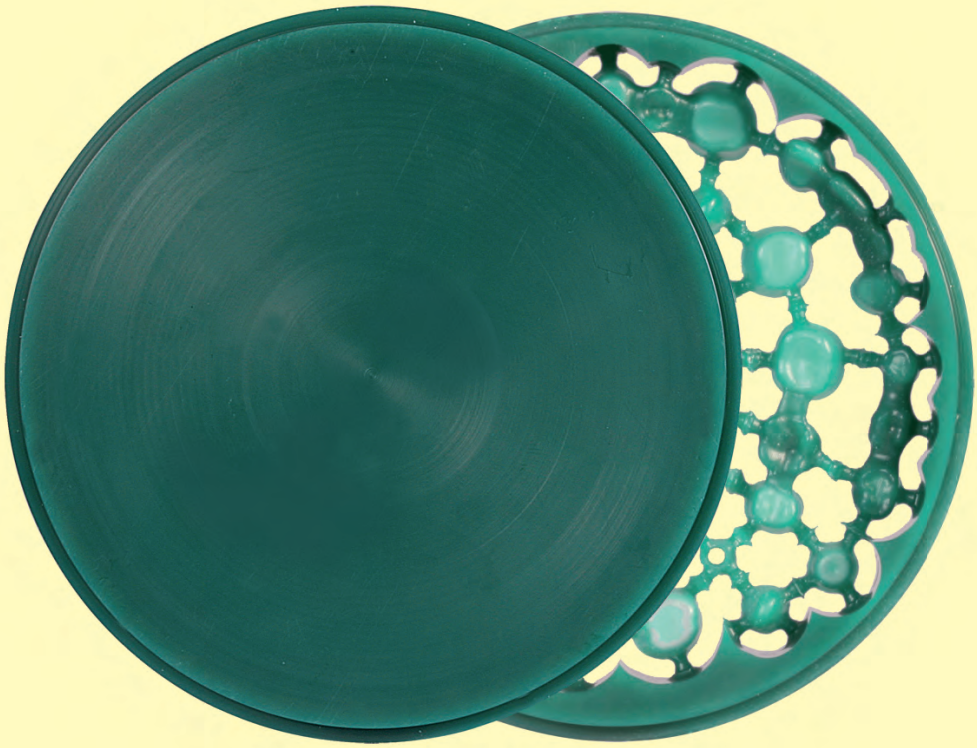
	20 mm
breCAM.wax 2 blanks	REF **540 0201 1**

The breCAM.wax blanks are made from a special milling wax (micro-crystalline hydrocarbon wax with paraffin waxes and polyethylene) which is easy to process. Because of this, the blank is suited to use in open CAM systems, for the digital manufacture of fully-anatomical or reduced frameworks, crowns and bridges for metal casting or ceramic pressing technology and the use of high implant work.

Technical specifications of **breCAM.wax**

Size:	round 98.4 x 20 mm with cervical step 10 x 2 mm
Colour:	green
Material:	microcrystalline hydrocarbon wax with hard paraffins and polyethylene sections
Dropping point:	120°C, material burns without trace

M = 1:1
Ø 98 mm





20 mm



breCAM.wax

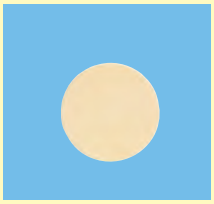
The significant advantage of the cutting manufacture of wax structures for the casting technique lies in the fact that the wax blank has been melted and cooled in a controlled manner and therefore has homogeneous and very limited tension behaviour, entirely independent of the various framework and connector strengths or spans of the structure. The conventional wax technique of fusing, dipping and combining various waxes quickly leads to uncontrollable results.

Overheating destroys important catalysts of the wax and different wax temperatures and applied strengths can cause strong tensions in the structure of the wax, which may lead to poorly seated and poorly fitting casts.

breCAM.BioHPP milling blanks

breCAM blanks for the CNC milling technique
High-quality raw materials offer the ideal basis for high-quality dentures.

- Blanks with a diameter of 98 mm, suitable for all current milling machines
- The incorporated level offers secure and simple fixing of blanks in the retainer



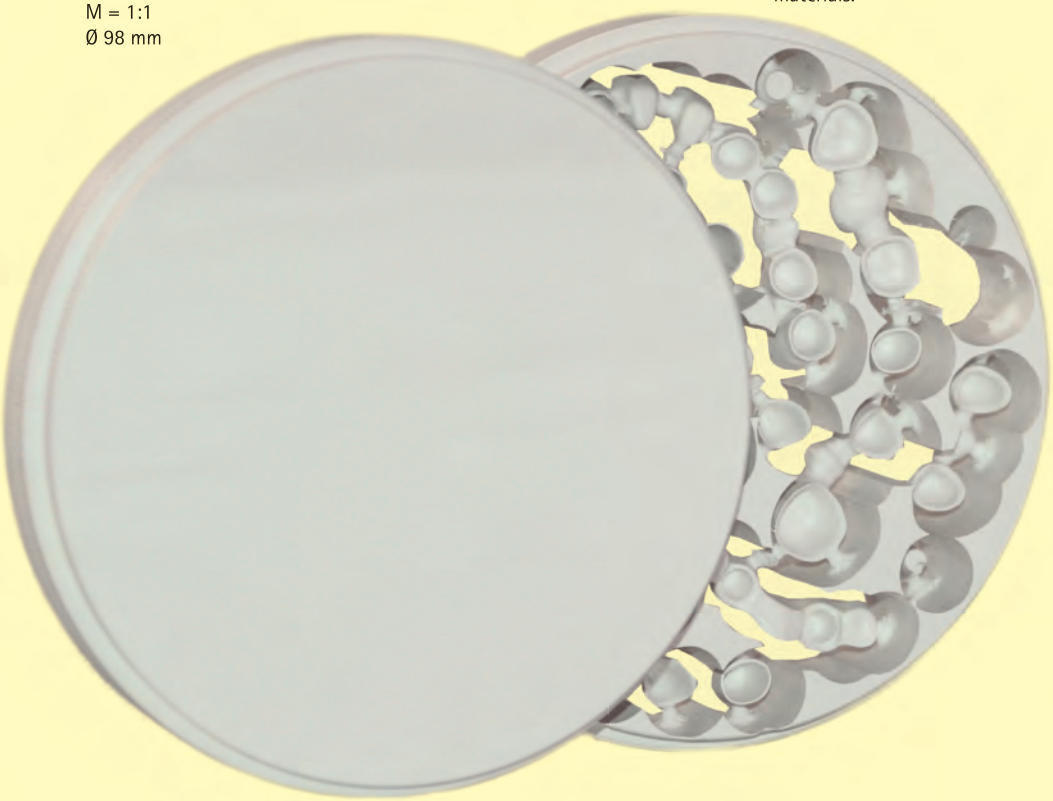
		16 mm	20 mm	24 mm
breCAM.BioHPP 1 blank	REF	**540 0203 0**	**540 0203 1**	**540 0203 2**

BioHPP is a high-performance polymer (PEEK) material with ceramic fillers. For more than 30 years, PEEK has been used in human medicine as an implant material.
breCAM.BioHPP has great potential as a framework material in dental prosthetics, is significantly cheaper than gold and is easier and better to process in dental laboratories than non-precious metals, titanium or ceramic.

The extraordinary elasticity of the material also comes into play here, as it is close to that of bone, and is therefore capable of compensating for the torsion of the bone, particularly in larger implant work.

For processing breCAM.BioHPP we expressly recommend our breCAM.cutter mill, which has been specially developed for dry and wet processing of thermoplastic materials.

M = 1:1
Ø 98 mm



Technical specifications of breCAM.BioHPP	
E-modulus:	4000 MPa
Flexural strength: (no material failure)	150 MPa
Colour:	white
Water absorption:	6.5 µg/mm³
Water solubility:	0.3 µg/mm³



16 mm 20 mm 24 mm



Processing breCAM.BioHPP

Thanks to its excellent stability, its optimal polishable properties and its low plaque affinity, BioHPP is particularly well suited for producing high-quality prosthetic restorations, whereby the aesthetically-pleasing white colour "White Shade" of the material is eminently suited to use in a tooth-coloured veneer, e.g. by means of the visio.lign veneer system from bredent.



Processing reference:

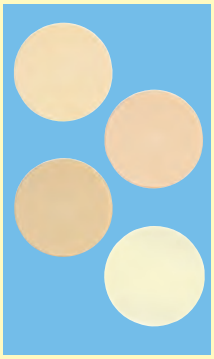
Veneer technique visio.lign Chapter 9
Mill, breCAM.cutter page 79

For the perfect high gloss
Plastic polishing set
REF 350 0081 0 Chapter D

breCAM.resin milling blanks

breCAM blanks for the CNC milling technique
High-quality basic materials provide perfect prerequisites for top-quality dental restorations.

- Blanks with a diameter of 98 mm, suitable for all standard milling machines
- The integrated step ensures reliable and simple fixation of the blanks in the holder
- Different heights offer more flexibility, hence also suitable for higher implant restorations
- Different thicknesses of the blanks guarantee economical and faster milling
- High-quality resin blanks for temporary restorations



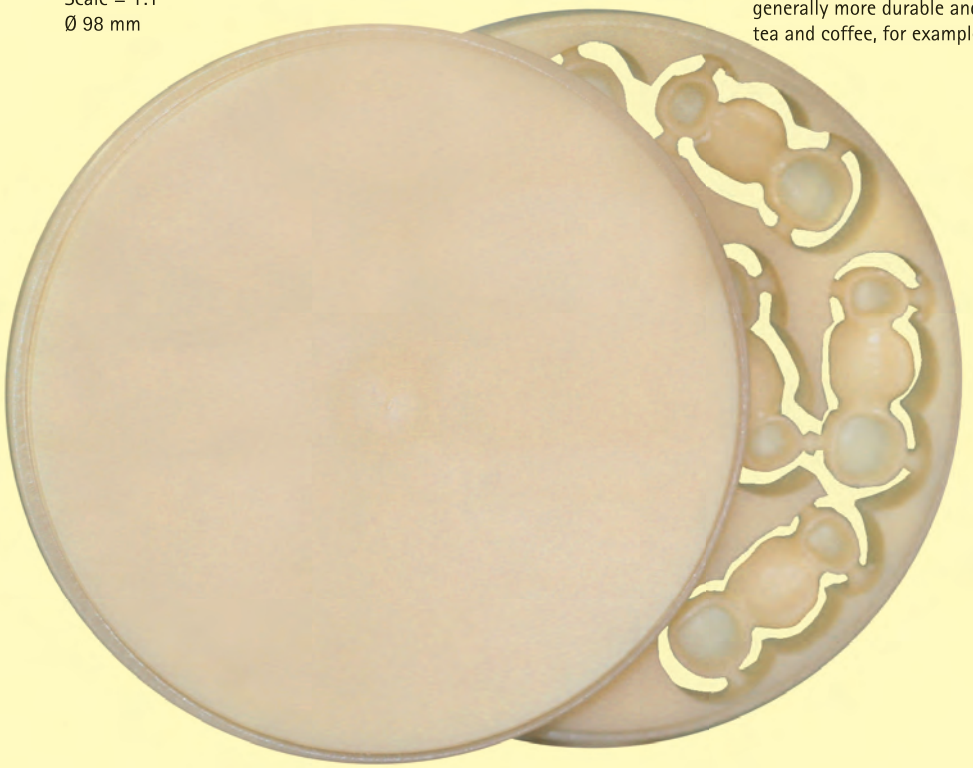
		16 mm	20 mm	24 mm
breCAM.resin A 1 Blank	REF	**540 0201 0**	**540 0201 1**	**540 0201 2**
breCAM.resin B 1 Blank	REF	**540 0201 3**	**540 0201 4**	**540 0201 5**
breCAM.resin C 1 Blank	REF	**540 0201 6**	**540 0201 7**	**540 0201 8**
breCAM.resin transparent 1 Blank	REF	**540 0201 9**	**540 0202 0**	**540 0202 1**

The breCAM.resin blank is produced using polymethylmethacrylate in the colours A, B and C (corresponding to Vita-colour A2, Vita-colour A3/B2, Vita-colour C2/D3) and transparent, in the industrial thermoplastic manufacturing process.

The advantage compared to the standard chemoplastic PMMA blanks on the market is a denser networking of hydrocarbon chains which leads to a high fracture resistance and flexural strength.

Thermoplastic blanks therefore exhibit a higher plaque resistance, and are generally more durable and resistant to discolouration as a result of cigarettes, tea and coffee, for example.

Scale = 1:1
Ø 98 mm



Technical data - breCAM.resin:

Modulus of elasticity:	2760 MPa
Flexural strength:	114 MPa
Elongation at break:	7 %



16 mm 20 mm 24 mm



breCAM.resin

The use of breCAM.resin as substructure material - veneered with visio.lign veneers - enables economic fabrication of long-term temporaries. Economic fabrication of anatomical temporary restorations is also possible. The high surface density of breCAM. resin guarantees extremely low plaque affinity.

Accessories:

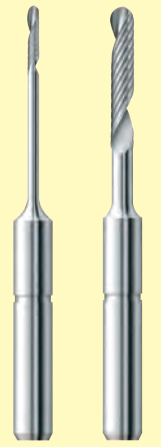


Generation M
chapter C

breCAM.resin is free of dibenzoyl peroxide and tertiary amines. Due to its material class and processing, breCAM.resin has an extremely limited residual monomer content is therefore highly biocompatible.

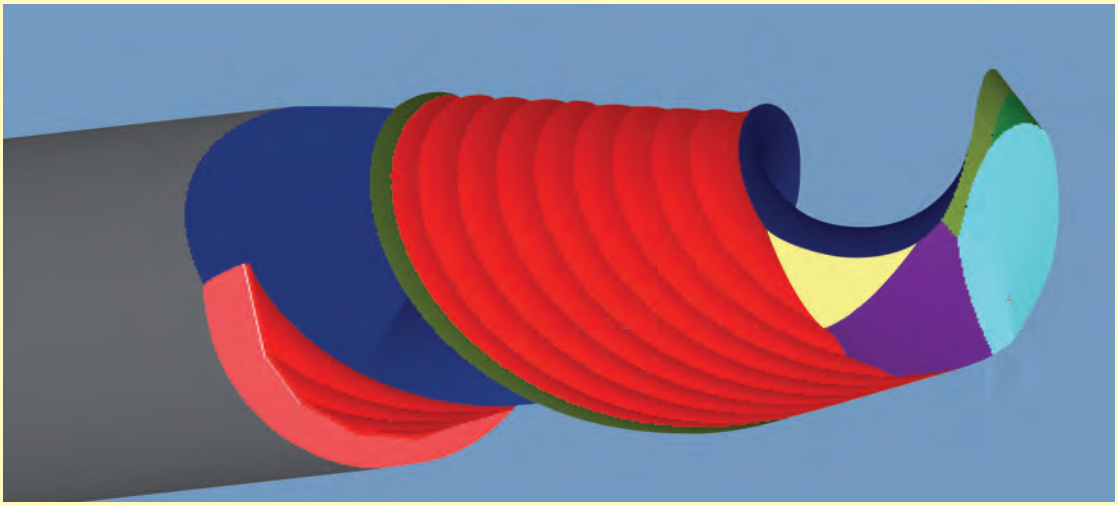
The transparent material is approved for medical use and can be used for splints, try-ins, tabletops, reduction caps or framework material for burning out for the casting technique.

breCAM.cutter



The breCAM.cutter
was developed especially for dry processing of PMMA and PEEK in CNC milling systems. Thanks to its patented geometry, it can also be used for milling thermoplastic materials, which have a tendency to rapid smearing and clogging of the tool, without cooling with water.

specially desigend for dry-milling purpose, usable for wet milling as well.
Cutter stays clear, even by milling materials with the tendancy clogging the bur



- Patented blade geometry, avoiding overheating
- Single blade cutter
- Usable for popular machines
- Enhanced cutter for dry-milling (thermoplastic material, PEEK,wax)

REF	Manufacturer	Type	Shank diameter	Diameter of working section	Total length	Working section length with chip channel
breCAMX47	Wieland, Imes Icore, Coritec, 340i, 450i, 440i	Radius cutter	3.0	1.0	38.2	15.0
breCAMX48	Wieland, Imes Icore, Coritec, 340i, 450i, 440i	Radius cutter	3.0	2.0	38.2	15.0
breCAMX49	3M Espe, LAVA Form System 400, 500, Charly Robot	Radius cutter	3.0	1.0	38.0	15.0
breCAMX50	3M Espe, LAVA Form System 400, 500, Charly Robot	Radius cutter	3.0	2.0	38.0	15.0
breCAMX53	Roland DWX 40, DWX 50, Calidia, TDS, DMG U-Serie, Yenadent, Orgien	Radius cutter	4.0	1.0	50.0	15.0
breCAMX54	Roland DWX 40, DWX 50, Calidia, TDS, DMG U-Serie, Yenadent, Orgien	Radius cutter	4.0	2.0	50.0	15.0
breCAMX67	VHF, FinoCAM, Jeneric Pentron, Schütz, Trendgold	Radius cutter	3.0	1.0	34.0	15.0
breCAMX69	VHF, FinoCAM, Jeneric Pentron, Schütz, Trendgold	Radius cutter	3.0	2.0	34.0	15.0

Exakto-Rock S

Exakto-Rock S is a synthetic super-hard class IV stone with distinctive thixotropy and improved flow properties and is free from formaldehyde.



Reduced expansion is completed after 2 hours and is only 0.08 %. As a result, highly accurate impressions are enabled and precision-fit restorations are ensured. Moreover, thanks to optimized reflection of light, Exakto-Rock S is suitable for scanning and available in crown and ivory.

- fomaldehyde-free stone ensures safe processing and can be used for the fabrication of holistic dentures without any problem
- synthetic components ensure consistent quality and enable the fabrication of precision-fit models
- improved flow characteristics facilitate pouring of several impressions
- optimized reflection of light thanks to special dye pigments reduce reworking/adjustments in the CAD system



Color brown:

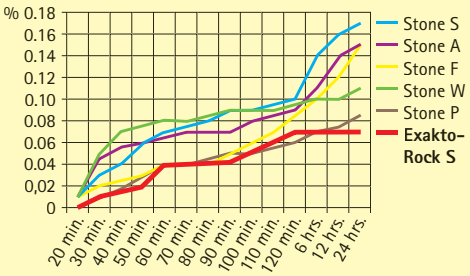
1 x 2 kg	**REF 570 0SB5 2**
5 x 2 kg	**REF 570 0SB5 1**
10 x 2 kg	**REF 570 0SB5 0**



Color ivory:

1 x 2 kg	**REF 570 0SE5 2**
5 x 2 kg	**REF 570 0SE5 1**
10 x 2 kg	**REF 570 0SE5 0**

Expansion of various other stones





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Customised framework manufacture requires the highest level of precision. This is facilitated by the use of high-quality modelling waxes, special waxes and successful casting technology in everyday application. The investment material for exact-fit precision casting reduces the need for repetitions and therefore saves time.



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Manual



The „bredent casting technique" loose-leaf folder (Dental casting, accurate – homogeneous – compatible) is intended to be used as a manual by the user. The folder's purpose is not to „transform" the dental technician into a material scientist or metallurgist using scientific data and chemical formulas. It is rather the objective of the folder to simplify reliable scientific data and experience for the dental technician as a user.

bredent casting technique

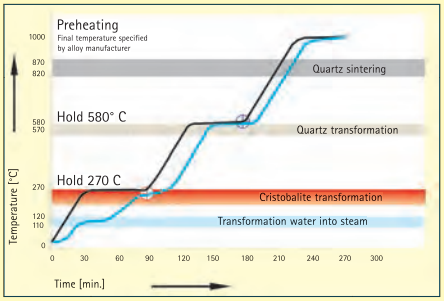
The dental cast
precisely fitting - homogeneous - compatible

230 pages
REF 992 961G B

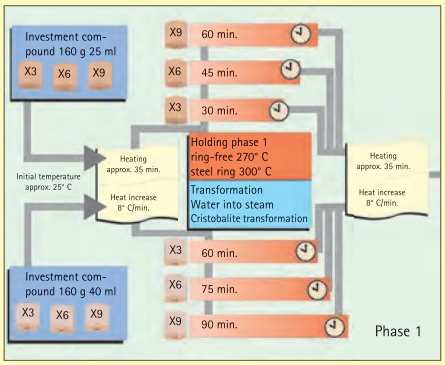


Course program

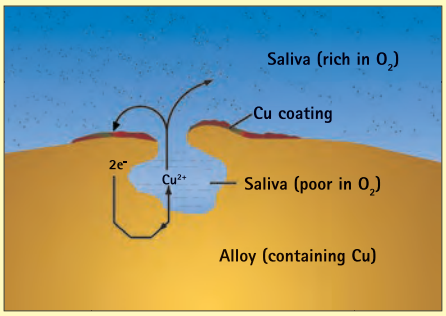
In the „bredent casting technique" course you will learn the systematical procedures.
The know-how conveyed in this course is to enable you to achieve reproducible high-quality results.



Helpful knowledge of furnace management and the behaviour of the investment material allows many problems to be solved.



Linear preheating
How must the preheating furnace be set for each mould sizes?



How does the galvanic element work and what happens in the mouth?

bredent group

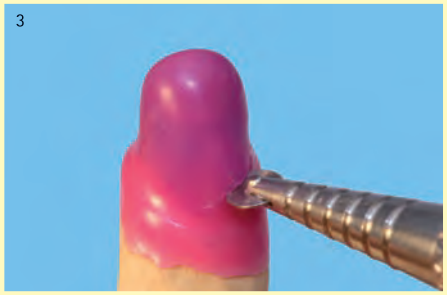
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1

For easy and secure removal of the modelling, insulate the model die using Isobre wax insulating liquid. Micro-fine application does not alter the accuracy of fit of the model.


2

The special dipping waxes facilitate the manufacture of wax caps which fit perfectly. The visual check of the coating thickness provides the highest level of security and reduces expensive processing.


3

Excess wax is removed quickly and easily using the cervical wheel. The thin incision made by the precise steel cutting wheel prevents inaccuracies in fit in the wax coping caused by distortion.


4

The distortion-free cervical waxes make an exact border seal possible. Ideal processing is ensured due to the uniform heating of the wax with an electric wax knife.


5

Modelling waxes in various colours and qualities provide a wide range of products. Additional products, such as wax aids or moulds for occlusals facilitate everyday work and reduce the outlay of time.

Low distortion waxes are required in order to achieve a model that fits exactly. For this, bredent offers a wide range of colours and qualities for every requirement. Various wax aids and the well-known Gnathoflex silicone moulds for occlusals are available for time-saving modelling.
Light-curing materials also enable rapid and secure modelling and facilitate everyday work.

Materials used

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Metal-ceramic blocks mkbl	page 99
Metal-ceramic blocks with shallow collar fg-mkbl	page 99
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Aesthetic wax veneers ä-wv	page 100
Hollow pontics hpg	page 101
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Optiguss	page 108
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Isobre wax insulating liquid



Isobre wax insulating liquid
750 ml
REF 540 0104 0

Accessories:



Brush pen pk 20
20 ml
REF 540 0072 0

Micro-fine insulating liquid on organic basis for reliable, exact separation of the wax pattern against all dental materials.





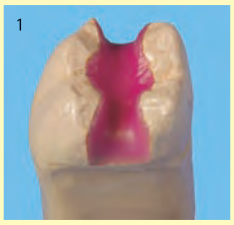


Isobre wax insulating liquid on organic basis is absolutely reliable, solvent-free and can be washed off easily. Neutral against plastic, ceramic, metal, plaster and painted surfaces. Even when the insulated surface has dried, Isobre wax insulating liquid will produce a highly efficient, micro-fine insulating layer which ensures simple and safe removal of the wax pattern. Highly absorbing surfaces must be insulated 2 to 3 times.

Elaflex



Elaflex
purple
130 g
REF 510 0090 0



Even in inlays, the cavities can be precisely prepared using Elaflex. This way, modelling is simplified.

Super-elastic dipping wax for highly precise wax copings.
The elasticity of Elaflex allows to remove the wax coping without deforming it. Thanks to the self-insulating effect, a precise coping can be prepared on metal elements polished to high luster.



Elaflex is so flexible that the wax coping is not deformed when it is removed.



Elaflex is self-insulating on all metal parts that are polished to high luster.

Visio-Dip

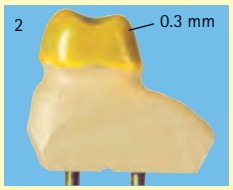


Visio-Dip
yellow
130 g
REF 510 0073 0



At a wax thickness of more than 0.4 mm the die is no longer visible.

Visual dipping wax with a wax thickness of < 0.3 mm. Ideal coating thickness checks due to the transparency of the wax.



The die becomes visible at a layer thickness of 0.3 mm. Less finishing work is required if a precise wax thickness is ensured.

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Tauchwachs



Accurate, precise fitting wax copings with properties similar to resin.
The dipping waxes allow the fabrication of highly precise wax copings with perfect fit.
Thanks to the properties that are similar to those of resins they can be processed on all surfaces without separating. Different colors ensure perfect contrast to the subsurface.
The basis for efficient and precise working!

green
130 g
REF 510 0087 0

dentine color
130 g
REF 510 0089 0

yellow
130 g
REF 510 0085 0

brown
130 g
REF 510 0088 0

red, 130 g
REF 510 0086 0

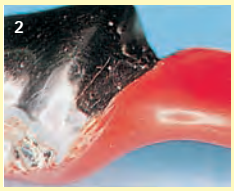
Accessories:



Cervical disc
REF 320 0091 0



Shows the constant wax thickness and excellent marginal fit without having to re-wax the cervical margin. Dipping wax is supplied as beads.



The dipping wax requires no separating medium for removal from smooth preparations or metal work. Hence it is ideal for precision dental technical work.



Use the white wax to block out undercuts or to build up the ideal shape of preparation. It does not adhere to the other waxes.



Tooth-colored dipping wax perfectly suitable for Life-Color wax structures.

Cervical disc



Cervical disc
REF 320 0091 0



Increases precision and reduces working time when making wax or plastic patterns.



This precision steel cutting disc is 0.1 mm thick, 3.0 mm in diameter and can be guided exactly when cutting.



Shows a comparison of the cuts made in 0.5 mm thick wax using a scalpel (left) and cervical disc (right).



Shows an extremely precise pattern, produced using our dipping wax without the need to re-wax the cervical margin.

Waxpool duo



Waxpool duo unit
REF 110 0150 0

Waxpool duo handpiece
REF 110 0151 0

Assortment

4 parts
1 Waxpool duo unit
1 Waxpool duo handpiece
2 Waxpool duo contouring blades at your choice

REF 110 0152 0

Wax dipping unit and wax knife all in one – digital control for added comfort
- Stable and easy to clean plastic housing
- Exchangeable plastic lids
- Clear design
- °C or °F can be selected

Wax dipping unit
- Precise temperature control of the dipping wax for increased quality
- High-performance heating elements reduce the time for heating the wax
- Uniform wax copings thanks to constant temperature control
- Special, lowered safety dipping wax to avoid burning of fingers
- Melting temperature up to 120° C

Wax knife
- A separate wax knife can be connected
- A single unit at the working place
- Non-tiring working thanks to ergonomic design of the handle
- Special insulating elements reduce heating up of the handle
- Simple exchange of blades
- Boost key for quick heating up to the end temperature
- Maximum temperature of 240° C

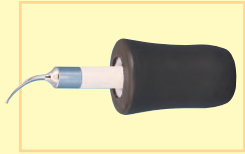
Accessories:



Rest
REF 140 0096 5



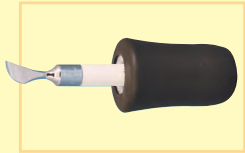
Contouring blade size 1
REF 320 WP4G 1



Contouring blade size 3
REF 320 WP4G 3



Contouring blade size 5
REF 320 WP4G 5



Contouring blade standard
REF 320 WP47 2

Wax knife bwm 3



Control unit bwm 3
with handpiece and contouring blade size 5
REF 140 0096 3

Control unit
bwm 3
REF 140 0096 0

Handpiece
bwm 3
REF 140 0096 2



Rest
bwm 3
REF 210 0045 1



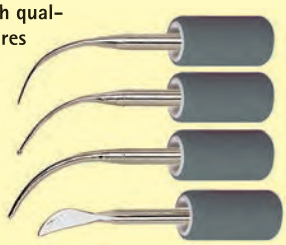
Footswitch
bwm 3
REF 140 0096 1

Accessories:

Foam rubber grip lining
4 pieces
REF 140 0096 4

Electric wax knife featuring integrated advanced technology and high quality. The ergonomic handpiece allows to take up wax quickly and ensures comfortable working.

- Ergonomically designed handpiece
- Quick heating up with the Rapid-Speed footswitch
- Adjustable temperature control
- Simple and fast exchange of the contouring blades



Contouring blade bwm 3 size 1	**REF 320 004G 1**
Contouring blade bwm 3 size 3	**REF 320 004G 3**
Contouring blade bwm 3 size 5	**REF 320 004G 5**
Contouring blade bwm 3 Standard	**REF 320 0047 2**



Comfortable and quick removal of the contouring blades.



Device for firm, reliable hold of the handpiece at the unit.



Mobile rest for safe depositing of the handpiece.



Blade shapes proven over numerous years allow individual application.



Integration into the grip for quick and simple exchange of the contouring instruments without the risk of injuries.



The special instrument grip avoids twisting of the contouring tip whilst working.



The contouring tips are stored on the control unit in a safe and clearly arranged manner.



If the wax knife is not needed, it can be placed on the rest in the direct reach of the technician.



The footswitch allows to quickly reach a higher temperature than the one that has been set. Activation of the footswitch is indicated by the control lamp.



Logical and clearly arranged control unit for stress-free and safe working.



Handpiece with flexible, stable cable for simple working.



High-tech dental equipment featuring highly useful function and design - for comfortable and simple working.

Quick Change



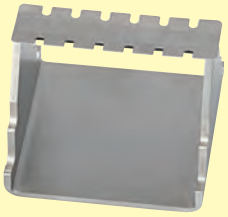
The combination of design, function and systematics.

Quick change system for instruments for ceramic, model fabrication and prosthetics

- Design carbon handle – esthetic and haptic
- Stainless blade holder with magnetic receptacle for perfect fixation of all blades
- All metal components and magnets are corrosion-resistant
- Temperature resistance of instruments inside the handle: 80°C
- Single hand use with quick change system
- Individual indications for ceramic, model fabrication and prosthetic
- Easy control thanks to reduced range of instruments
- Clever system allows to find the suitable instruments quickly (protection of registered design!)
- Troublesome screwing with keys is avoided
- Blades can be adjusted at any position – familiar working position is retained
- High safety thanks to immediate release of the heated blades
- Proper storage of sensitive ceramic blades
- Ceramic brushes can be perfectly stored in a hanging position
- Ceramic blades with high surface quality for outstanding gliding properties



Carbon handle
L 101 mm, Ø 8 mm
REF 310 0103 1

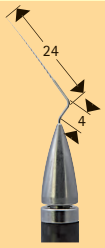


Halter
w 102 x d 100 x h 75 mm
Weight approx.. 575 g
REF 310 0103 0

Overview of instruments
Dimensions in mm



TwinPoint
REF 310 0105 6



Fissure tool
REF 310 0103 4



Olive
REF 310 0105 7



Croco, smooth
REF 310 0103 2



Croco, serrated
REF 310 0103 3



Adapter with M4 thread
REF 310 0103 5



MagicContrast size 6
REF 310 0105 3



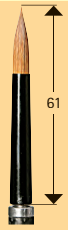
MagicContrast size 8
REF 310 0105 4



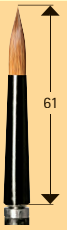
MagicContrast size 8B
REF 310 0105 5



KoliBrush size 6
REF 310 0104 4



KoliBrush size 8
REF 310 0104 5



KoliBrush size 8B
REF 310 0104 6



Blade according to Zahle
REF 310 0104 0



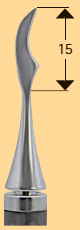
Probe 0.8
REF 310 0104 1



Probe 1.1
REF 310 0104 2



Blade 0308 Fig. 3
REF 310 0103 7



Blade 0408 Fig. 4
REF 310 0103 9

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Wax for outer copings



For secondary metal elements. Special consistency avoids the formation of grooves on the inner side of the coping.

Wax for outer copings
25 g
yellow
REF 510 0042 0



Easily spread and, whilst cooling, will not shape creases on the surface exposed to the metal. Extremely high precision of fit, thanks to the minimal shrinkage.

Biotec-Wax for outer copings



The modelling wax for uniform application of coats with minimal shrinkage and unsurpassed burning out properties.

Biotec-Wax for outer copings
28 g
violet
REF 510 0061 3



Uniform coping thickness due to perfect scraping properties. When the die shines through, a layer thickness of 0.3 to 0.4 mm has been achieved.



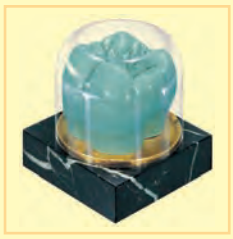
Low shrinkage and excellent burning out properties ensure utmost precision of fit and homogeneous castings.

K2 exact



K2 exact
60 g
grey **REF 510 0090 2**
yellow **REF 510 0090 3**
beige **REF 510 0090 4**
green **REF 510 0090 5**

Extraordinary carving qualities for the highest precision in all crown, bridge and inlay work. Low shrinkage and, as a consequence, precise waxing up are distinctive features of this carving wax. The solidification phase is very short; hence K2 exact carving wax is suitable for selective waxing up. The hardness results in good scraping properties and allows perfect smoothening of the wax model.



Marble plinth
and dome
REF 320 0042 0



The extremely low shrinkage allows high precision even with feather edges.



A short solidification phase makes it easier and quicker for modelling into the correct tooth shape required.



The strength and homogeneity of the wax provide optimal carving qualities and allow to produce smooth polished surfaces.

Standard Modelling wax



Standard Modelling wax
beige
70 g Click-Clack jar
REF 510 0078 5

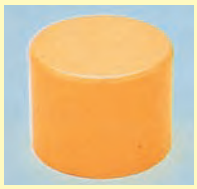
Beige modelling wax for crown and bridgework and for the inlay technique. The solidification temperature of 50°C allows to work quickly. The beige color avoids tiring of the eyes during waxing up and supports the three-dimensionality so that deep occlusal surfaces can be perfectly recognized.

Gecko





The wax pattern can be compared objectively with the adjacent tooth.





The wax reproduces the contours and colour of the model exactly, which is pleasant to work with and will not tire the user.





Opaque wax allows for improved determination of the depth of the fissures in the wax pattern.





The contours are easier to discern thanks to the way in which these pastell shades reflect the light.

Available in different colors for convenient and non-tiring waxing up.
The special wax quality allows highly precise application and perfect sculpturing.

Gecko modelling wax
25 g

beige, for Thixo-Rock and Fuji Rock	**REF 510 0060 2**
yellow, for Super Die	**REF 510 0060 4**
green, for Die Keen	**REF 510 0060 1**
red, for Vel-Mix-Stone	**REF 510 0060 3**

Splendido



This wax is suitable for any type of wax-ups: crowns, bridges and inlays. Also suitable for milling. Splendido is also available as summer wax „Splendido hard", which can be milled up to a room temperature of 40 °C.

Splendido 25 g, green

medium	**REF 510 0069 0**
hard	**REF 510 0059 0**





The light green colour of this wax provides for improved light reflection and facilitates determination of the final contouring. The opacity of this wax allows for improved determination of the depth of the fisures in the wax pattern.

KBI-wax



Wax for crowns, bridgework, inlays.
Minimal shrinkage, high stability, good modelling properties and smooth surfaces after scraping offer ideal possibilities for any waxing-up technique. Suitable for milling techniques.

KBI-Wachs 25 g, blue,

medium	**REF 510 0091 0**
hard	**REF 510 0092 0**





The light blue colour enables the technician to view the contours and surface structure of the pattern in greater detail. „KBI hard" is available for use in summer. Both waxes are, of course suitable for milling.

Life-Color-Wax



Tooth-colored wax in two consistencies. Particularly low-shrinkage wax especially developed for the waxing-up technique according to M. A. Polz.

Life-Color-Wax
25 g

dentine color, medium	**REF 510 0080 0**
dentine color, hard	**REF 510 0081 0**

100 g

dentine color, medium	**REF 510 0079 0**
dentine color, hard	**REF 510 0078 0**



Precise application and superior scraping properties are the distinctive features of this wax.

Biotec modellling wax



Modelling wax that meets highest demands on modelling properties, shrinkage and complete burning out.
The excellent scraping properties ensure perfect fit of the wax crown on the die.
Wax residues can be blown away easily.
Low shrinkage leads to high precision of fit.

Biotec modelling wax, 60 g
green **REF 510 0061 1**
grey **REF 510 0061 0**

Residue-free burning out is the prerequisite for homogeneous casting.
Perfectly suitable for modelling pressed ceramic crowns and inlays.



Easily controllable stability for specific application across small and large areas.

Cervical wax



In order to achieve a perfect marginal seal on crowns, inlays, onlays etc., the wax must adapt well and be completely shrink-free.

Cervical wax
25 g
red
REF 510 0060 5



Cervical wax is used for shaping the cervical margin and adheres perfectly to the coping and sculpturing wax.

Biotec-Cervical wax



Modelling wax for precision-fit crown margins due to low shrinkage and outstanding burning out properties.

Biotec-Cervical wax
28 g
red
REF 510 0061 2



The special consistency of this wax, minimum shrinkage and extremely low quantity of residues of combustion ensure perfect fit of the crown margin.

Biotec milling wax



Excellent milling wax with superb modelling properties.
Outstanding scraping and milling properties since sticking of wax to the bur is avoided.



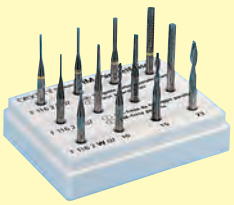
Biotec milling wax
28 g
blue
REF 510 0061 4



Enormous amount of time is saved thanks to good modelling properties since no other wax is required for the shear distributor.



Extremely accurate milling wax to produce smooth and shining surfaces during milling.



The bredent bur system can be found in chapter C!



Residue-free burning allows for use in pressed ceramics.

SERACOLL UV



SERACOLL UV connects bridges

- good capillary effect
- extremely high stability for perfect retention
- short hardening time
- improved casting results



SERACOLL UV
light-curing wax adhesive
2 x 3 ml
2 dosing dishes
REF 540 0115 1



The wax-up is prepared separately and thus any stress within the wax structure is avoided. After checking and fine contouring the crown margins, the wax-up is placed onto the model again.



One drop of SERACOLL UV is added into the separating gap using the probe. Thanks to the good capillary effect of SERACOLL UV the gap is evenly filled. The optimum size of the separating gap is < 0,3 mm. If required, add another drop to restore the original shape.



After each application of material, SERACOLL UV is hardened in standard UV light-curing units for at least 90 seconds.



The wax-up with sprues being attached can be removed from the model without the formation of stress and invested subsequently.



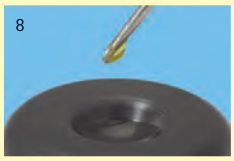
SERACOLL UV is perfectly suited for stress-free bar structures and other applications in the field of implant restorations.



SERACOLL UV is suited for all standard light sources (UV and LED). When using hand lamps, each surface of the model must be cured for 10 seconds.



By applying a thin layer of SERACOLL UV, all rough model surfaces can be smoothened. More homogeneous casting results are obtained.



Thanks to the enclosed small dosing dish, the required quantity of SERACOLL UV can be taken up with the probe.



Pi-Ku-Plast, compoForm UV and waxes can be connected with each other without any problems.



Attachment elements can be positioned in the parallelometer; one drop of SERACOLL UV is added into the gap and the rounded, clean transition zones are cured using a hand lamp.

compoForm UV





The stability of compoForm UV renders the material perfectly suitable for the transfer of the jaw situation and, consequently, stress-free working is ensured.

Light-curing composite for modelling, fixation of separated bridges and for quick fabrication of post and core restorations. compoForm UV burns out without leaving any residue and produces homogeneous casting results.
Individual modelling directly from the syringe. Thanks to immediate hardening with a polymerization lamp the model can be built up in a safe and controlled manner.

compoForm UV
2 x 3 ml syringes
10 application cannulas
REF 540 0115 0



compoForm UV can be used in conjunction with modelling wax and is perfectly suitable for inter-locking the model prior to investing. This way investing without any deformation is possible.



Modelling and further processing of telescopic and conical crowns can be perfectly controlled by means of a visual check of the layer. The high stability of the hardened composite allows reworking with a bur.



Thanks to low shrinkage and burning without any residue, the composite is ideal for fixation of bridges to be soldered.



Thanks to low shrinkage and burning without any residue, the composite is ideal for fixation of bridges to be soldered.

Accessories:



Application cannulas
25 pieces
REF 580 0001 8

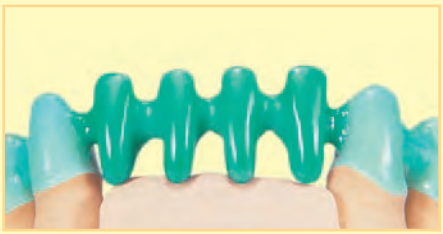


Undercuts on dies can be quickly and completely blocked out.



Burning without any residue and reduced swelling behavior provide perfect preconditions for top-quality casting results.

Biotec metal-ceramic blocks without collar b-mkbl



Auxiliary wax elements with properties similar to modelling wax and very limited quantity of residues of burning out. The melting point, hardness and scraping properties are adapted to the modelling waxes to allow simple and specific connecting of the auxiliary wax elements with the crown pattern. The extremely low quantity of residues of burning out of the Biotec auxiliary wax pattern provide perfect preconditions for smooth, homogeneous cast surfaces.

Tooth	17-14 RP	12-22 RP	24-27 RP
Size C			
B			
A			
A			
B			
C			
Tooth	47-44	42-32	34-37



Assortment

18 forms
x 5 parts ☐
REF B13 180 05

18 forms
x 10 parts ☐
REF B13 180 10

18 forms
x 20 parts ☐
REF B13 180 20



Refill packages (RP):
Each form and size is available as refill package cont. 10, 25, 50 or 100 pieces each. Please enter the exact number of pieces into the box next to the desired form.



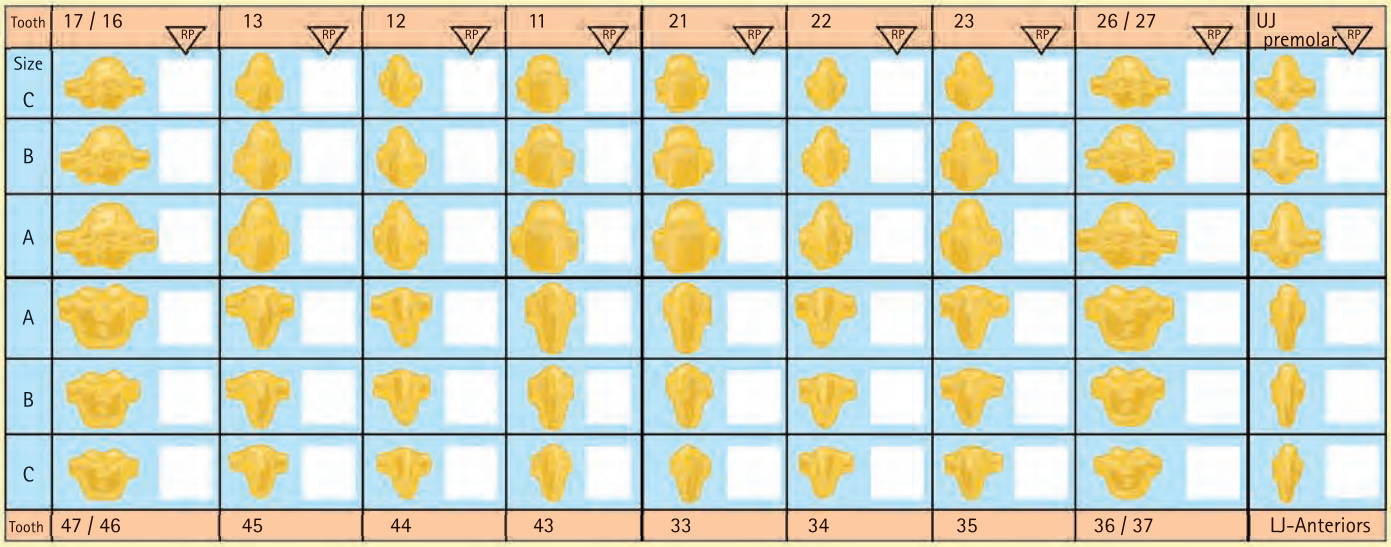
Minikit: ☐
18 forms
x 2 parts
REF B13 000 MK

Sender (Stamp):

Customer No.

Date, Signature

In-between pontics bwg



Design by Jan Langner

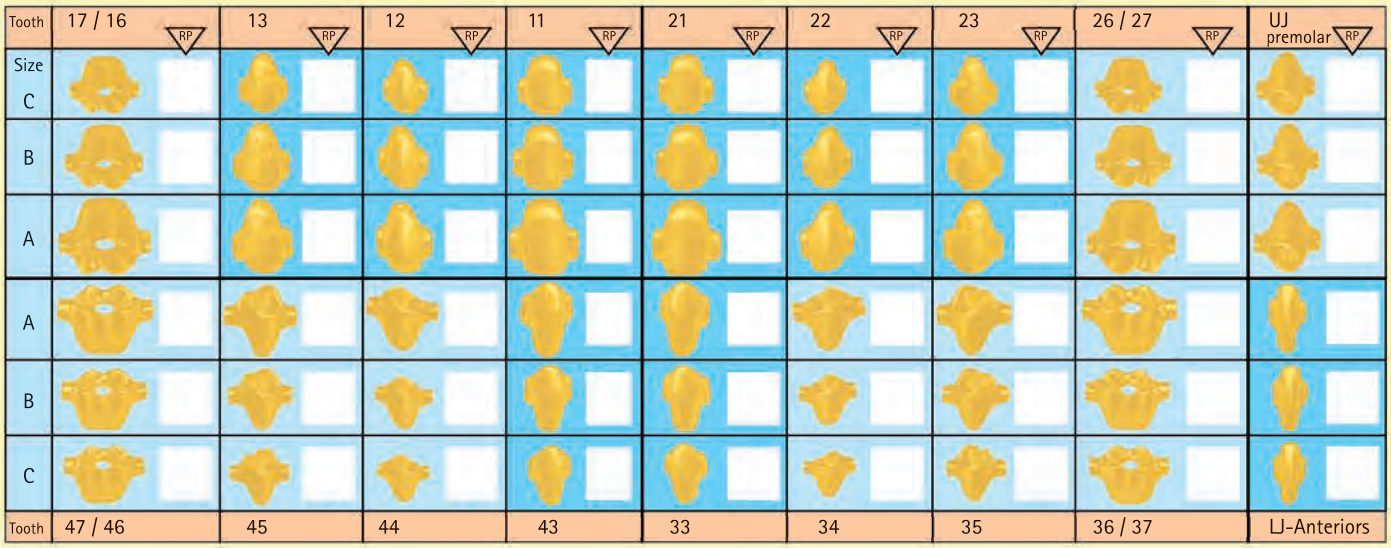
Refill packages (RP): containing 50 pieces each

Assortment In-between pontics bwg: containing 540 pcs.
(54 different forms with 10 individual pieces each)

REF D00 5401 0

Please enter number of desired packages in the box.

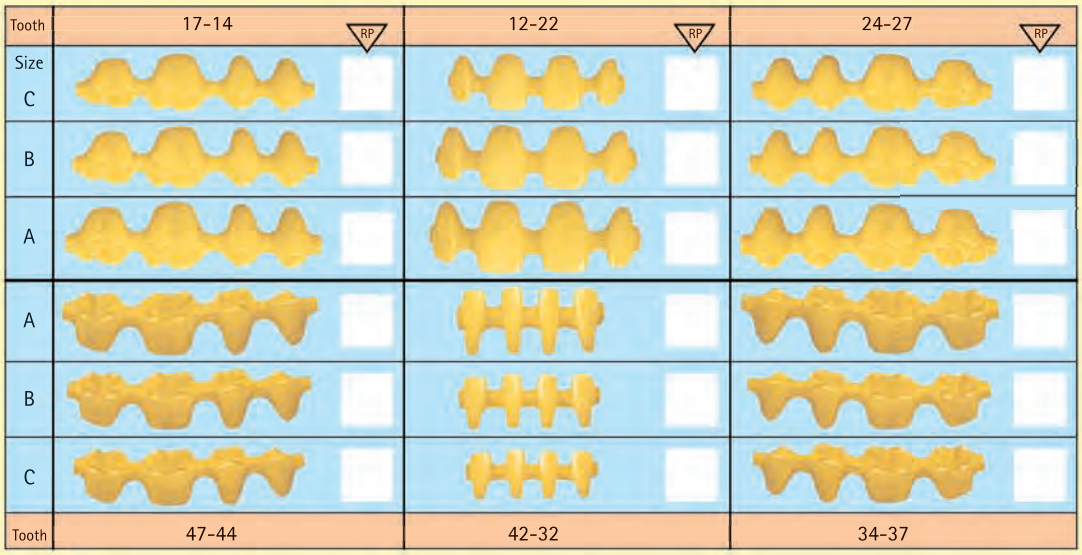
In-between hollow pontics bwhg



Refill packages (RP): containing 50 pieces each

Anterior assortment In-between hollow pontics bwhg
containing 300 pieces (27 different forms)

Betweenblocs bwbl



REF D01 2701 0

Please enter number of desired packages in the box.

Anterior and posterior assortment
In-between pontics and
In-between hollow pontics bwhg
containing 540 pieces.
(different forms with 54 individual pieces each 27 Hollow pontics and 27 Massive pontic)

REF D01 5401 0

Please enter number of desired packages in the box.

Refill packages (RP): each 25 pieces
Assortment
Between blocks bwbl:
containing 180 pieces
(18 different forms, each 10 blocks)

REF D00 1801 0

Please enter number of desired packages in the box.

Illustrations are full size

Sender (Stamp):

Customer No.

Date, Signature

Further order:

Please order from your dealer Please copy before filling in!

Between hollow blocks bwhbl

Tooth	17-14	RP	12-22	RP	24-27	RP
Size C						
B						
A						
A						
B						
C						
Tooth	47-44		42-32		34-37	



Refill packages (RP):
containing 25 blocks each

Assortment
Between hollow blocks bwhbl:
containing 12 hollow blocks (posterior blocks) and 6 massive blocks (anterior blocks)

REF D01 1801 0

Please enter number of desired packages in the box. ☐

Hollow pontic blocks hpbl

Tooth	17-14	RP	12-22	RP	24-27	RP
Size C						
B						
A						
A						
B						
C						
Tooth	47-44		42-32		34-37	



Refill packages (RP):
containing 25 blocks each

Assortment
Hollow pontic blocks hpbl:
containing 180 blocks (18 different forms with 10 blocks each)

REF A11 1801 0

Please enter number of desired packages in the box. ☐

Illustrations are full size

Sender (Stamp):

Customer No.

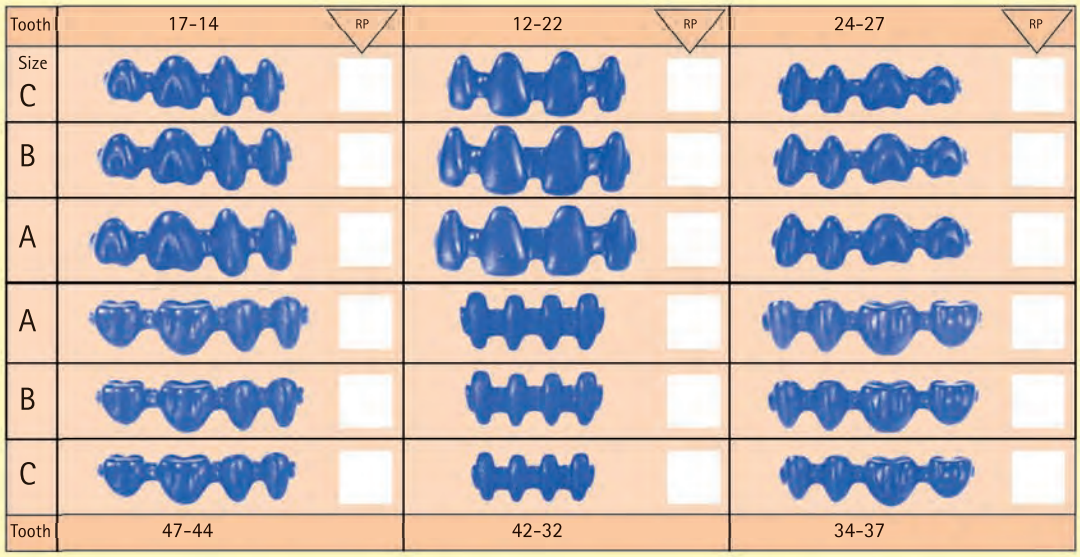
Date, Signature

Further order:

bredent group

Telephone (+49) 0 73 09 / 8 72-4 40

Metal-ceramic blocks mkbl



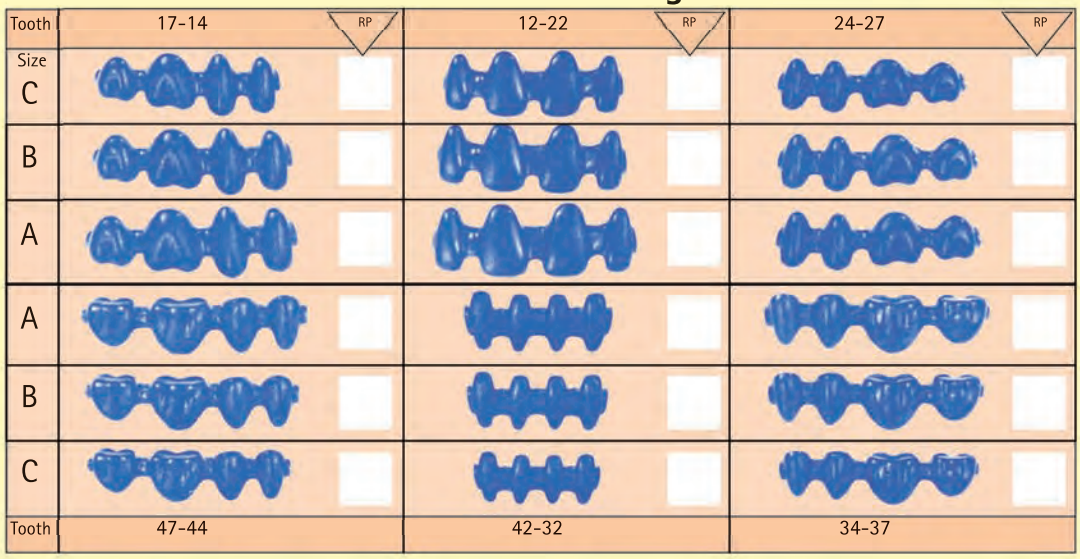
Refill packages (RP): 25 each

Assortment
Metal-ceramic blocks mkbl: containing 180 pieces. (different forms with 18 individual pieces each 10 blocks)

REF A00 1801 0

Please enter number of desired packages in the box. ☐

Metal-ceramic blocks with shallow collar fg-mkbl





Refill packages (RP): 25 each

Assortment
Metal-ceramic blocks with shallow collar fg-mkbl: containing 180 pieces. (different forms with 18 individual pieces each 10 blocks)

REF A01 1801 0

Please enter number of desired packages in the box. ☐

Illustrations are full size

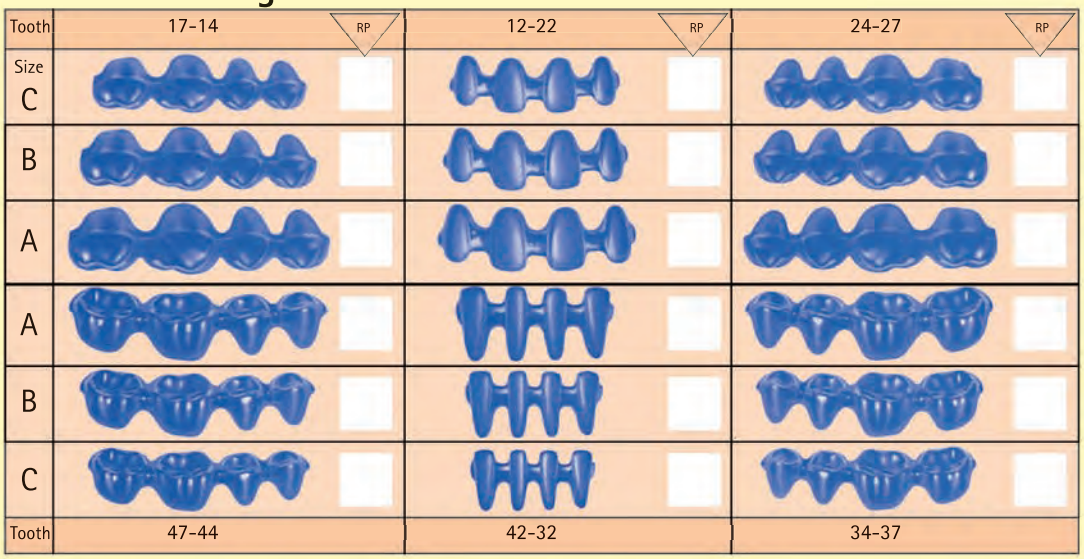
Sender (Stamp):

Customer No.

Date, Signature

Further order:

Aesthetic and ergonomic metal-ceramic blocks äe-mkbl





Refill packages (RP): containing 25 blocks each

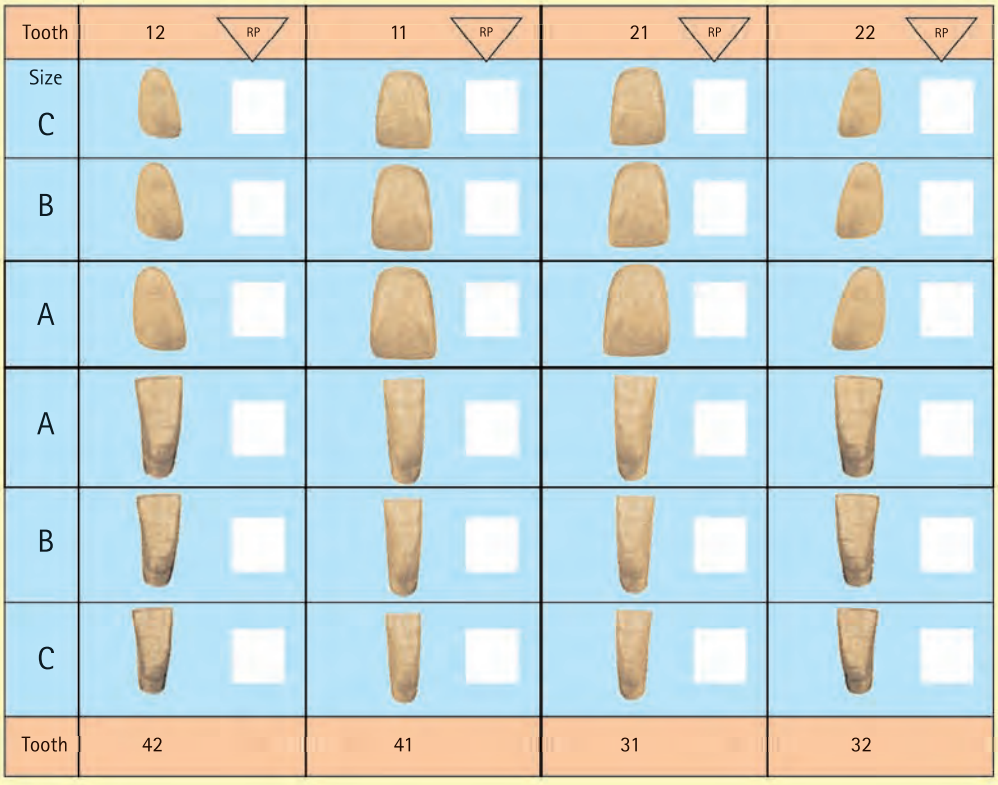
Assortment
Aesthetic and ceramic metal-ceramic blocks äe-mkbl:
containing 180 blocks
(18 different forms with 10 blocks each)

REF A02 1801 0

Please enter number of desired packages in the box.

Aesthetic wax veneers ä-wv

Design by Jan Langner, Master Dental Technician





Aesthetics and ergonomic ceramic pontics as a basis



Aesthetics wax veneers from the palatal side on aesthetic and ergonomic ceramic pontics



Aesthetics wax veneers from the labial side



Refill packages (RP): containing 50 pieces each

Assortment
Aesthetic wax veneers ä-wv:
containing 240 pieces
(24 different forms with 10 individual pieces each)

REF C13 2401 0

Please enter number of desired packages in the box.

Illustrations are full size

Sender (Stamp):

Customer No.

Date, Signature

Further order:

Please order from your dealer

Please copy before filling in!

Sender (Stamp):

Customer No.

Date, Signature

Further order:

Hollow pontics hpg

Design by W. Wedenig



Tooth	Molars 17 / 16	RP	Premolars 4 / 5	RP	13	RP	UJ Anteriors 12 / 11	RP	21 / 22	RP	23	RP	Molars 26 / 27	RP
Size C														
B														
A														
A			occlusal view											
B														
C														
Tooth	47 / 46 Molars						43		41 / 31 LJ Anteriors		33		36 / 37 Molars	

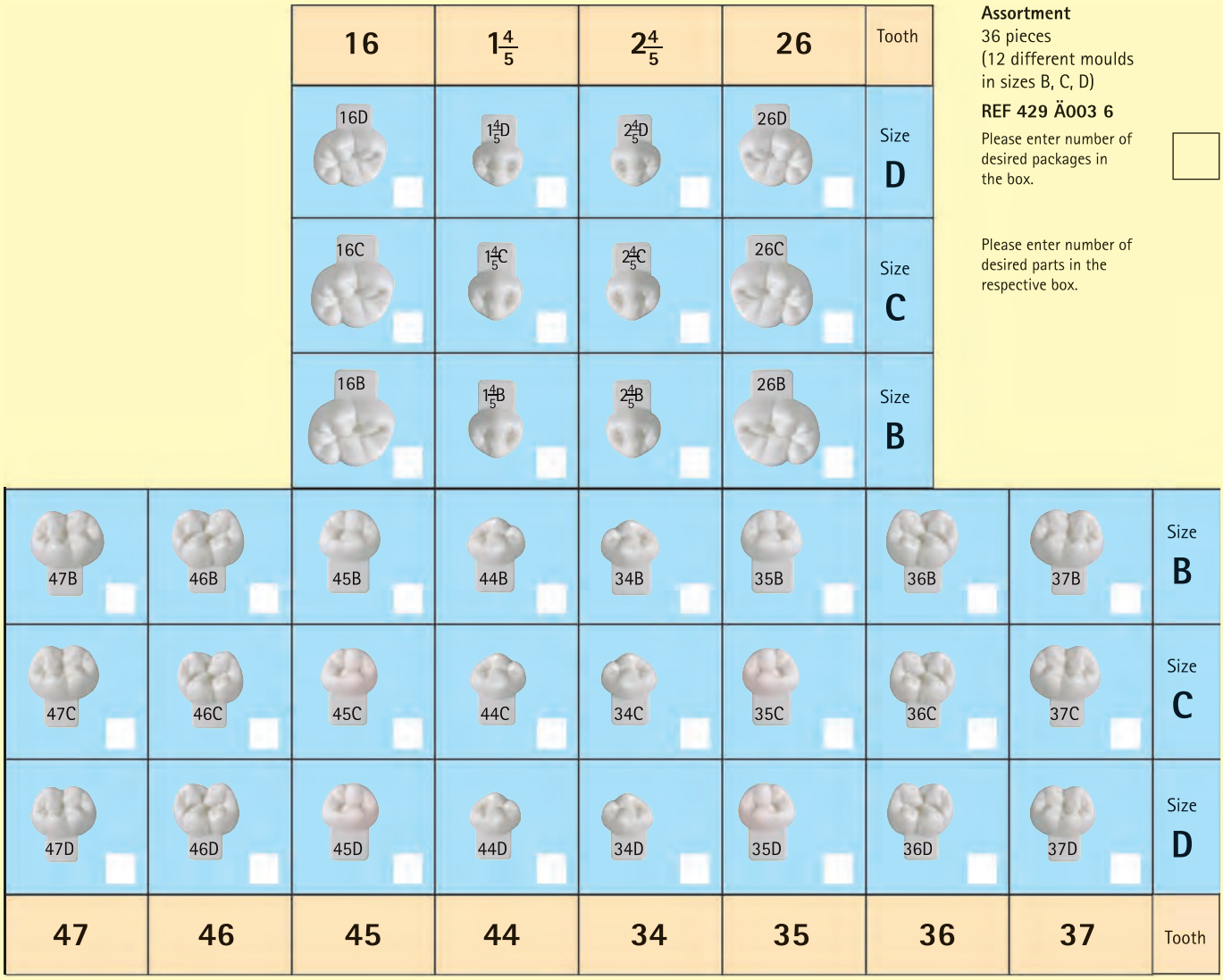
Refill packages (RP): 50 pieces each

Assortment Hollow pontics hpg:
containing 360 pieces.
(36 different forms with 10 individual pieces each)

REF A01 3601 0

Please enter number of desired packages in the box.

Aesthetic-Gnathoflex



Illustrations are full size

Assortment
36 pieces
(12 different moulds
in sizes B, C, D)

REF 429 Ä003 6

Please enter number of desired packages in the box. ☐

Please enter number of desired parts in the respective box.

Sender (Stamp):

Customer No.

Date, Signature

Further order:

Aesthetic-Gnathoflex



Flexible, re-usable silicone moulds for creating wax, acrylic or ceramic occlusals.
Shaping occlusal surfaces within seconds thanks to highly flexible silicone moulds.
- Can be used for many applications – with wax, acrylic and porcelain
- Saves time – thanks to the teflon coating super smooth surfaces are created immediately
- Only needs to be bought once - Aesthetic-Gnathoflex moulds can be reused

Achieve increased turnover in less time yet maintain constant high quality!



Gnathoflex is fabricated from high-grade silicone which maintains its stability up to 250 °C. The occlusal path is created by the mould, which is only 0.5 mm thick.



Gnathoflex is extremely flexible and very durable and ensures that its shape is maintained.



Gnathoflex precisely reproduces the anatomical cusps and fissures in wax, acrylic or porcelain. The result is a smooth, glazed surface.

Produce wax occlusals in 40 secs.



The aesthetic, but functional anatomy which Gnathoflex produces in wax patterns, may be modified to suit individual requirements.



The copings are prepared as usual, using wax or acrylic.



As soon as the wax begins to gel,

Produce acrylic occlusals in 90 secs.



Gnathoflex provides for high-luster occlusals when using the acrylic or composite of your choice. It is also ideal for temporary bridgework.



Gnathoflex is filled with the modelling wax of your choice.



place the Gnathoflex on the die.

Produce porcelain occlusals in 180 secs.



Porcelain work may be built up using the shade and anatomy of your choice. Any porcelain may be used.

You may also use Gnathoflex as the basic mould for fabrcating your laboratorys own individual occlusals.

Open the articulator 0.5 mm, measured at the surface being waxed-up, in order to allow for the thickness of the Gnathoflex.

Choose for yourself: Precisely articulated multiple contacts, minimum contact or exactly 0.5 mm out of occlusion.



Close the articulator and attach the Gnathoflex to the wax coping, using a drop of wax.



The second bridge abutment is waxed-up using the same method.



Shows the high-luster precision wax reproduction of the silicone mould.



A pre-formed wax pattern is used when waxing-up the occlusal surface of the pontic.



Shows the completed occlusal aspect of the bridge. Gnathoflex ensures uniform, aesthetic occlusals.



Lingual view of the intercuspidation between the wax pattern and the opposing teeth.



The buccal view shows the central cusp-to-fossa relationship.



Terminal occlusion contact areas, made visible by means of articulating film.

Aesthetic-Gnathoflex

Fabricate occlusals using any acrylic, no trimming required.



Prepare the coping as usual and apply the crown and bridge acrylic (dentine) of your choice.



No separating agent is necessary when filling the Gnatoflex with acrylic. First fill the cusps with incisal and then fill the mould completely with dentine. Place the mould on the bridge.



Close the articulator. When using photo-curing acrylic, commence polymerisation now, in order to fix the bite.



Remove the bridge, apply the interdental contact areas and complete the polymerisation. Having carried this out, remove the silicone moulds.

Accurately shaded porcelain occlusals, easier than ever before.



Apply the opaque, fire it and build-up the bridge using dentine. Brush a thin coat of Gnathoflex separating agent into the silicone mould.



First fill the Gnathoflex with incisal and then with dentine. The incisal material should be brushed out from the cusps toward the margins. In order to allow for the shrinkage, the articulator should be opened by more than 0.5 mm when building up porcelain occlusals.



Place the Gnathoflex on the bridge and fix it using porcelain. Complete the build-up using incisal, dentine or a mixture of both – depending upon the shade.



Dry the porcelain as usual or use a hair dryer. Carefully remove the Gnathoflex from the bridge. The bridge can now be removed from the model, further porcelain applied to the contact areas and the bridge fired as normal.

Accessories:



Isoflex
20 ml
REF 540 0101 3

Aesthetic-Gnathoflex



Create occlusal surfaces in seconds with these extremely flexible Teflon silicone moulds

- Can be used for many applications - with wax, acrylic or porcelain
- Saves time - thanks to the Teflon coating super smooth surfaces are created immediately.
- Only has to be bought once. Aesthetic Gnathoflex moulds can be re-used.

Achieve increased turnover in less time yet maintain constantly high quality!

- For wax patterns
- For ceramic
- For acrylic

bredent group

Gnathoflex Premium



Extremely flexible, reuseable silicone moulds for creating occlusals.
40 to180 seconds for a gnathological, aesthetically functional occlusal with wax, acrylic and ceramic.



Gnathoflex
Study model
FF1 Set
1 UJ model
1 LJ model
REF 992 5027 3

Original size



Gnathoflex
Study model
FF1 mini Set
1 UJ model mini
1 LJ model mini
REF 992 5027 4

Original size

Assortment



Gnathoflex Premium
48 pieces
16 different moulds
3 sizes A-B-C
REF 429 P004 8



Isoflex – if
20 ml
REF 540 0101 3

Gnathoflex Premium

Wax occlusals



The copings are prepared as usual, using wax or acrylic.



To compensate the thickness of the Gnathoflex, the bite is raised by 0.5 mm.



Fill Gnathoflex with wax and wait until the wax begins to gel.



Once the wax has hardened, place the Gnathoflex occlusal onto the coping.





Close the articulator in the position of maximum intercuspidation and attach the occlusal to the coping using a drop of wax. Depending on the situation, two or more Gnathoflex occlusals can be placed simultaneously or one after the other. The contact can be strongly varied by raising or lowering the antagonist.









High-luster, gnathologically shaped wax occlusals with perfect contact to the antagonist are the perfect basis for smooth and precision-fit casting. Gnathoflex Premium helps to save time during the preparation of the wax model as well as during finishing of crowns and bridges.





Acrylic occlusals



Prepare the structure as usual and apply crown and bridge acrylic (dentine).



No separating agent is required when filling the Gnathoflex with acrylic. First fill the cusps with incisal and then fill the mould completely with dentine.



Place Gnathoflex on the bridge, close the articulator and polymerize with UV light in order to fix the bite.



Then the bridge is removed, interdental contact areas are applied and polymerization is completed.

Ceramic occlusals



The opaque is fired on the metal structure.



Hold the Gnathoflex with the tweezers and apply Isoflex insulating liquid onto the inner surface.



Tap several times on the Gnathoflex to remove excess Isoflex insulating liquid.

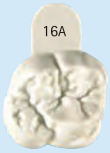






Fill incisal into the cusps and brush out from the cusps toward the margins. Fill the Gnathoflex with dentine and place on the bridge structure. Close the articulator and turn it. Fix the Gnathoflex occlusals to the bridge using dentine material. Dry the object and carefully remove the Gnathoflex. The other occlusals are prepared accordingly. Complete the bridge.

Gnathoflex Premium

17	16	15	14	24	25	26	27	
 429 P017 C	 429 P016 C	 429 P015 C	 429 P014 C	 429 P024 C	 429 P025 C	 429 P026 C	 429 P027 C	**C**
 429 P017 B	 429 P016 B	 429 P015 B	 429 P014 B	 429 P024 B	 429 P025 B	 429 P026 B	 429 P027 B	**B**
 429 P017 A	 429 P016 A	 429 P015 A	 429 P014 A	 429 P024 A	 429 P025 A	 429 P026 A	 429 P027 A	**A**
 429 P047 A	 429 P046 A	 429 P045 A	 429 P044 A	 429 P034 A	 429 P035 A	 429 P036 A	 429 P037 A	**A**
 429 P047 B	 429 P046 B	 429 P045 B	 429 P044 B	 429 P034 B	 429 P035 B	 429 P036 B	 429 P037 B	**B**
 429 P047 C	 429 P046 C	 429 P045 C	 429 P044 C	 429 P034 C	 429 P035 C	 429 P036 C	 429 P037 C	**C**
47	**46**	**45**	**44**	**34**	**35**	**36**	**37**	

Illustrations are full size

Please select the desired parts from the original illustrations.

Please enter number of desired parts in the respective box or highlight the assortment.

Please enter number of desired packages in boxes.

Assortments **Gnathoflex Premium:**

16 pcs, containing 16 moulds in size A
REF 429 P000 A ☐

16 pcs, containing 16 moulds in size B
REF 429 P000 B ☐

16 pcs, containing 16 moulds in size C
REF 429 P000 C ☐

48 pcs, containing 16 moulds in 3 sizes ABC each
REF 429 P004 8 ☐

Sender (Stamp):

Customer No.

Date, Signature

Optiguss

The solution for increased perfection with less effort.
Optiguss Micro – 5 micron coating – or Optiguss Macro – 10 micron coating – can be applied easily and quickly to the wax pattern to smooth, seal and reinforce it without changing its shape.
The use of Optiguss reduces the finishing time by 50 % compared to a conventional cast surface.



Optiguss-macro 15 ml
REF 520 0092 0

Optiguss-micro 15 ml
REF 520 0093 0



Optigussschale macro-macro
2 pieces
REF 390 0035 0



3 **Brushes** size A + brush holder **REF 330 0114 6**

3 **Brushes** size B + brush holder **REF 330 0114 7**

3 **Brushes** size C + brush holder **REF 330 0114 8**



Brush cleaning pot
2 pieces
REF 390 0037 0



Brush cleaner
20 ml
REF 520 0094 0

Assortment



15 ml Optiguss-macro
15 ml Optiguss-micro
3 Brushes size A
3 Brushes size B
3 Brushes size C
2 Brush cleaning pot
1 Brush cleaner

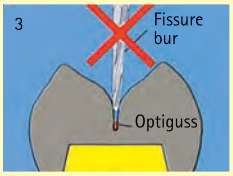
REF 520 0091 0



Even when the pattern is waxed-up as carefully as possible, minute scratches and rough areas remain in the wax which have to be trimmed out of the casting.



Applying Optiguss creates super smooth surfaces.



Deep fissures, which cannot be reached with a fissure bur, can be smoothed with Optiguss. This simplifies polishing of gnathologically designed occlusals.



The finishing time can be reduced by more than 50 % due to more homogeneous surfaces.



Approximal contact areas are strengthened, yet retain their shape.



Fitting surfaces are built-up properly and smoothed, which reduces the time required for trimming.

bredent group

Telephone (+49) 0 73 09 / 8 72-4 40

Crystals and beads



Retention crystals
0.2 mm, 20 ml
REF 530 0048 0
0.5 mm, 20 ml
REF 530 0050 0
0.8 mm, 20 ml
REF 530 0051 0





Retention beads

0.2 mm Ø, 20 ml	**REF 530 0201 0**
0.4 mm Ø, 20 ml	**REF 530 0220 0**
0.6 mm Ø, 20 ml	**REF 530 0210 0**
0.8 mm Ø, 20 ml	**REF 530 0200 0**



Retention adhesive
20 ml **REF 540 0071 1**

Thinner **REF 540 0071 2**

Retention adhesive, white – no capillary action, solubilizes the crystals and adheres perfectly as well as having a long working time.

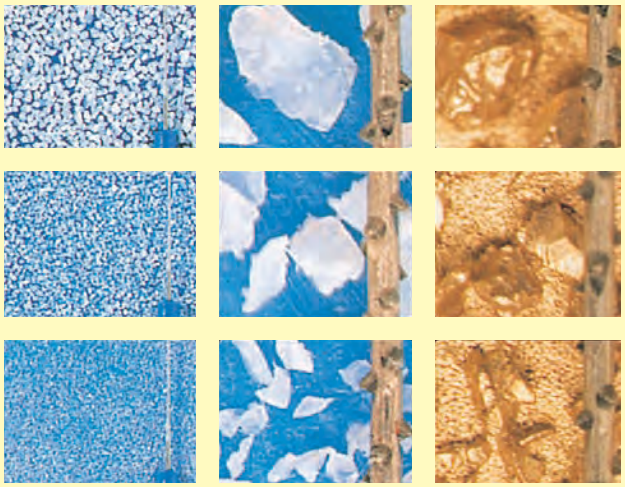
Optimum retention leads to the strongest possible acrylic/metal junctures.



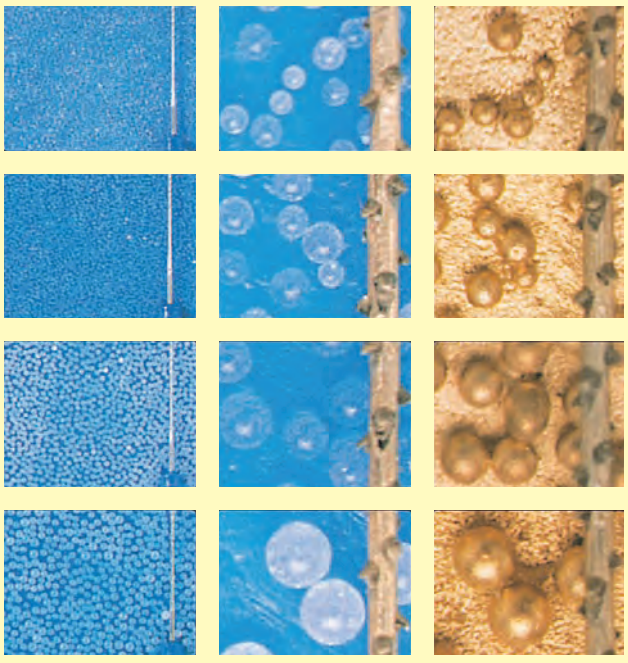


Crystals have double the retentive area of beads.

Original size | 10x magnification | 10x magnification (gold)



Micro retention beads result in elegant facings.



INNOVATIONS



For almost 40 years, bredent has offered innovative solutions for use in the dental technology laboratory and this forms a central part of the company's philosophy.

New developments and procedural techniques will significantly influence the future of dental technology and dentistry.

Due to close contact with customers and monitoring of national and international dental markets, ideas and recommendations for modifications find their way into the company's product portfolio. This exchange enables the processes in the laboratory and in the practice to be optimised and costs to be reduced.

bredent desires and strives to achieve the consistent implementation of the ISO 9001 quality standards, thereby offering the user maximum product safety and, as a result, ensuring that patients receive an implant prosthetic restoration of the highest quality.

Efficiency through innovation!

Deutsche Dental Industrie

bredent group

Telephone (+49) 0 73 09 / 8 72-4 40

1



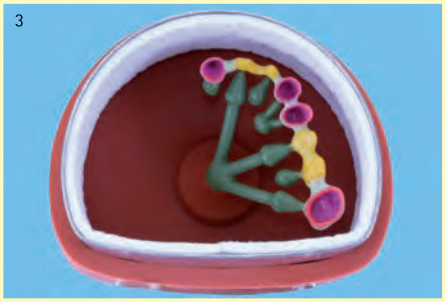
Thanks to their design, the special casting channels improve the casting result. Centrifugal casting and vacuum pressure casting must be differentiated between in order to create the ideal prerequisite for each casting system.

2



The rinsing heads create melt reservoirs and act as a pressure balance for homogeneous casting. Alloy is saved by reducing the casting channel system and an outstanding casting result is achieved.

3



The semi-circular casting mould system enables exact placement of the model outside of the heat centre. The casting technology products are matched to one another to ensure that perfect and reproducible casting results can be produced.

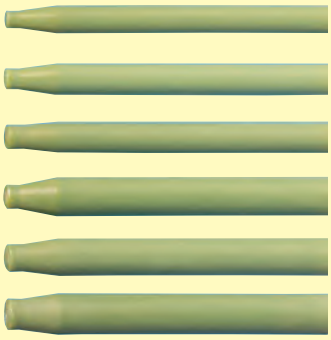
bredent's casting system is completed by the casting
channel system. With the right choice of casting channel and rinsing heads, the casting is more precise and homogeneous. Correct metallurgic work is therefore produced, which can also be better processed and defects in the additional processing can be reduced.

Materials used

Sprues for vacuum pressure casting	page 112
Sprues for centrifugal casting	page 113
Rinsing heads	page 114
Rinsing heads for voluminous castings	page 114
Double rinsing heads	page 115
Double rinsing heads for voluminous castinags	page 115
Protek wax patterns cut to size	page 115
Biotec reels of wax pattern	page 116
Reels of wax pattern	page 116
Wax pattern sticks	page 116
Quadro wax profile	page 117
Quadrosticks	page 117
Casting pears	page 117

Sprues for vacuum pressure casting

Sprues and rinsing heads suitable for all casting techniques to ensure homogeneous, uniform and predictable casting results.



Sprue channel Ø mm	Sprue Ø mm	Pack. pieces	REF
2.0	3.5	50	**430 0143 1**
		150	**430 0146 3**
2.5	4.0	50	**430 0143 2**
		150	**430 0146 4**
3.0	4.0	50	**430 0143 3**
		150	**430 0146 5**
3.0	5.0	50	**430 0143 4**
		100	**430 0146 6**
3.5	5.0	50	**430 0143 5**
		100	**430 0146 7**
4.0	5.5	50	**430 0143 6**
		100	**430 0146 8**

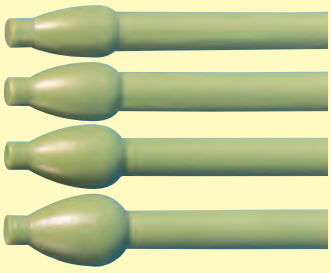




Assortment

450 pieces
Vacuum pressure casting, containing 30 sprues and 30 rinsing heads each,
REF 430 0146 0

Sprues for vacuum pressure casting for voluminous castings



Sprue channel Ø mm	Head Ø mm	Sprue Ø mm	Pack. pieces	REF
3.5	6.5	5.0	50	**430 0143 7**
			100	**430 0146 9**
3.5	7.5	5.0	50	**430 0143 8**
			100	**430 0147 1**
3.5	8.5	5.0	50	**430 0143 9**
			100	**430 0147 2**
3.5	9.5	5.0	50	**430 0144 0**
			100	**430 0147 3**



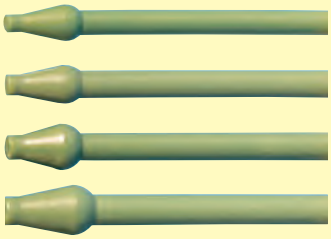
Assortment

211 pieces
Vacuum pressure casting for voluminous castings, containing 30 sprues and 30 rinsing heads each, 25 g Protek wax patterns (rods) cut to size, Ø 1.0 mm, **REF 430 0147 0**

bredent group

Telephone (+49) 0 73 09 / 8 72-4 40

Sprues for centrifugal casting



Sprue channel Ø mm	Head Ø mm	Sprue Ø mm	Pack. pieces	REF
2.5	4.5	3.0	50	**430 0144 1**
			150	**430 0147 7**
2.5	5.0	3.5	50	**430 0144 2**
			150	**430 0147 8**
3.0	6.0	3.5	50	**430 0144 3**
			150	**430 0147 9**
3.5	6.5	4.0	50	**430 0144 4**
			150	**430 0148 1**

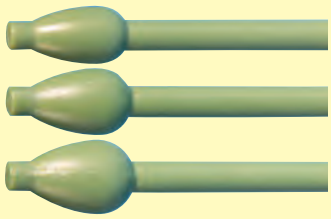




Assortment

390 pieces
Centrifugal casting, containing 30 sprues and 30 rinsing heads each, **REF 430 0148 0**

Sprues for centrifugal casting for voluminous castings



Sprue channel Ø mm	Head Ø mm	Sprue Ø mm	Pack. pieces	REF
3.5	7.5	4.0	50	**430 0144 5**
			100	**430 0148 2**
3.5	8.0	4.0	50	**430 0144 6**
			100	**430 0148 3**
3.5	9.5	4.0	50	**430 0144 7**
			100	**430 0148 4**

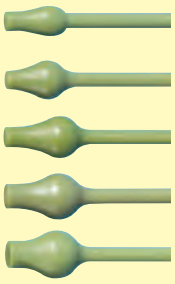


Assortment

181 pieces
Centrifugal casting for voluminous castings, containing 30 sprues and 30 rinsing heads each, 25 g Protek wax patterns (rods) cut to size, Ø 1.0 mm, **REF 430 0148 5**

Rinsing heads

Rinsing heads for vacuum and centrifugal casting. Since the residual air is forced into the rinsing heads, a high density of the structure is obtained to deliver superior casting results.

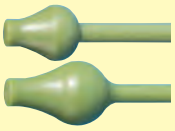


Sprue channel Ø mm	Head Ø mm	Pack. pieces	REF
2.5	4.0	50	**430 0144 8**
		150	**430 0148 6**
2.5	5.0	50	**430 0144 9**
		150	**430 0148 7**
2.5	5.5	50	**430 0145 0**
		150	**430 0148 8**
3.0	6.0	50	**430 0145 1**
		150	**430 0148 9**
3.5	6.5	50	**430 0145 2**
		150	**430 0149 1**

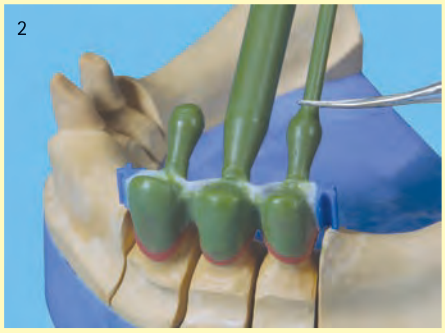


The retainer helps to attach the rinsing heads.

Rinsing heads for voluminous castings

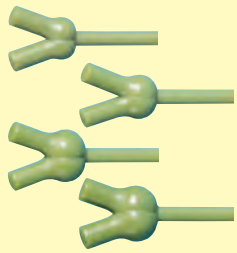


Sprue channel Ø mm	Head Ø mm	Pack. pieces	REF
3.5	7.5	50	**430 0145 3**
		100	**430 0149 2**
3.5	8.5	50	**430 0145 4**
		100	**430 0149 3**



The retainer is cut off with the wax knife after waxing up the rinsing heads.

Double rinsing heads



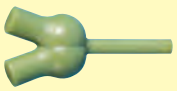
Sprue channel Ø mm	Head Ø mm	Pack. pieces	REF
2.5	4.0	50	**430 0145 5**
		150	**430 0149 4**
2.5	5.0	50	**430 0145 6**
		150	**430 0149 5**
2.5	5.5	50	**430 0145 7**
		150	**430 0149 6**
3.0	6.0	50	**430 0145 8**
		150	**430 0149 7**

1



The double rinsing heads are used for two objects with the same volume. Attaching is easier and the amount of work is reduced.

Double rinsing heads for voluminous castings



Sprue channel Ø mm	Head Ø mm	Pack. pieces	REF
3.5	6.5	50	430 0145 9
		150	430 0149 8

Protek wax patterns cut to size

Protek wax patterns cut to size, rods, for cooling fins, pressure compensation and vent channels

- Ø 0.8 mm, 15 g, **REF 430 0125 0**
- Ø 1.0 mm, 25 g, **REF 430 0150 2**
- Ø 1.2 mm, 55 g, **REF 430 0121 0**

2



During casting the compressed air is displaced into the air channels and produces castings free from shrinkage cavities, which can be easily fitted.

Biotec reels of wax pattern



Sprue wax with organic components, highly flexible and burns out perfectly.

Biotec reels of wax pattern
250 g, beige

Cross section in Ø mm	REF
1.2	**430 0801 2**
1.5	**430 0801 5**
2.0	**430 0802 0**
2.5	**430 0802 5**
3.0	**430 0803 0**
3.5	**430 0803 5**
4.0	**430 0804 0**
5.0	**430 0805 0**





High flexibility and low elastic recovery after shaping allow specific, stress-free attaching of the sprues. Residue-free burning out is the basis for perfect casting results.
Perfectly suitable for modelling pressed ceramic crowns and inlays.

Reels of wax pattern



Various diameters of wax pattern are available in medium and hard consistencies.

Reels of wax pattern, 250 g

Cross section in Ø mm	REF blue (medium hard)	REF green (hard)
1.2	**430 0115 0**	
1.5	**430 0115 5**	
2.0	**430 0116 0**	**430 0111 0**
2.5	**430 0116 5**	**430 0111 5**
3.0	**430 0117 0**	**430 0112 0**
3.5	**430 0117 5**	**430 0112 5**
4.0	**430 0118 0**	**430 0113 0**
5.0	**430 0118 5**	**430 0113 5**





The wax patterns can be bent without recovering elastically or becoming pinched.

Wax pattern sticks





Wax pattern for sprues made of extremely hard special wax.
Extremely hard special wax to ensure that the wax model will not be deformed when it is removed; result: highly accurate castings, even for large-span work. Dimensional stability at room temperature so that the wax model can be safely removed.

Wax pattern sticks
250 g, red

Ø mm x length	REF
2.0 x 115	**430 0172 3**
2.5 x 115	**430 0172 1**
3.0 x 115	**430 0168 0**
3.5 x 115	**430 0169 0**
4.0 x 115	**430 0170 0**
4.5 x 115	**430 0172 2**
5.0 x 115	**430 0171 0**
6.5 x 115	**430 0172 4**



Wax model with direct fitting of the sprues. No deformation of the model during removal if wax profile sticks are used.



Wax pattern with attached sprues connected with a bar. The wax pattern sticks can be easily bent by heating them slightly and thus adapted to the bridge shape. Safe removal of the model at room temperature.

Quadro wax profile



Square sprues for better casting results.
Studies have shown that all liquids - including liquid metal - flow in drops; that also applies to flowing into a square sprue.
Accordingly, the gas (air) contained in the cavity (casting mould) can escape freely across the unfilled corners. Results:

- no swirling of molten metal due to the back pressure of the residual air
- faster flowing in of the molten metal
- more homogeneous castings
- smoother surfaces
- increased precision of fit



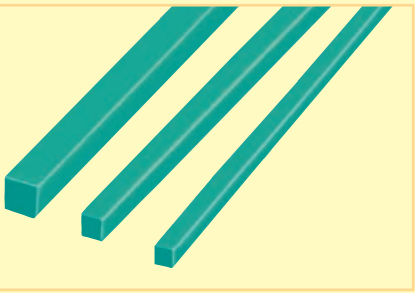
Quadro wax profile
250 g, green

1.75 x 1.75 mm	**REF 430 0691 0**
2.25 x 2.25 mm	**REF 430 0692 0**
3.00 x 3.00 mm	**REF 430 0693 0**

Quadrosticks



The Quadrosticks made of extra-hard special wax can not be deformed at room temperature. This way distortion of the wax pattern is avoided when removing it from the model. This is a crucial prerequisite for precision-fit dental work.





Assortment

150 pieces
Quadrosticks
65 pieces 1.75 mm
50 pieces 2.25 mm
35 pieces 3.00 mm
REF 430 0164 0

Quadrosticks, green

- 1.75 X 1.75 X 50 mm, 150 PCS
  REF 430 0165 0
- 2.25 X 2.25 X 50 mm, 125 PCS
  REF 430 0166 0
- 3.00 X 3.00 X 50 mm, 85 PCS
  REF 430 0167 0

Casting pears



Pointed "Lost head" for fast and specific attaching the casting object with wax; suitable for centrifugal casting.

Casting pears
100 pieces each

Ø	length	
6 mm	9 mm	**REF 430 0740 6**
7 mm	10 mm	**REF 430 0740 7**
8 mm	11 mm	**REF 430 0740 8**
9 mm	12 mm	**REF 430 0740 9**

BETTER QUALITY OF LIFE – BACK TO A HEALTHY SLEEP

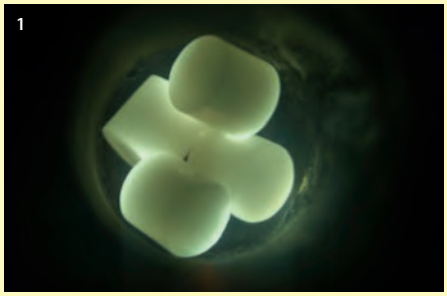


Snoring has become the most widespread disease. In 50% of bedrooms, healthy sleep is disturbed by extreme snoring – this can be as loud as 90 decibels, which corresponds to the noise of a passing lorry.

Two forms of treatment are available. The protrusion splint, which is worn in the case of slight or medium obstructive sleep apnoea syndrome, and biofunctional treatment with a vacuum activator, are used in the case of primary snoring without obstruction.

Become an advisor for your practice and establish your laboratory's position in a new and attractive area of business. Comprehensive information material is available for laboratories, practices and patients.

Added value for your laboratory!



bredent alloys allow for very easy processing due to the low degree of hardness. This reduces expensive processing and reduces the need for a large amount of burs.



Brevest investment materials for results that fit perfectly! The exact controllability of the material enables precise fitting of the expansion and therefore reduces expensive processing or repetitions. This enables stress-free working and saves time.



The rapid pre-heating of the investment material saves time and adds flexibility.

A high level of quality is very important to bredent. This is also the case when it comes to investment materials, which have been developed for time-saving processing due to perfectly fitting results. The investment materials, which can be inserted exactly, enable stress-free working and significantly reduce adjustment times. Accuracy is aided by the special shape of the mould ring and the exact placement.

Materials used

Wax-Lite surface tension reducing agent	page 120
Silicone and wax surface tension reducing agent	page 120
Mould release agent	page 120
Metal muffle rings	page 121
Fleece liners	page 121
Wash primer for fleece	page 121
Silicone muffle rings	page 122
Vakuum Anrührsystem ecovac	page 123
Brevest C+B Speed	page 124
Brevest Rapid 1	page 124
Transfuser	page 125
Investment marker	page 126
Casting ring marker	page 126
Golden booklet	page 126
Brealloy C+B 270	page 127
Brealloy MK	page 127
Brealloy Lot	page 128
Brealloy flux	page 128
Oxyd-Stop-PM	page 129
Oxyd-Stop-NPM	page 129
Oxyd-Stop Silver-Palladium alloy	page 130
Heat absorbent paste	page 130
Brecid pickling agent	page 130

Wax-Lite surface tension reducing agent



Alcohol-free surface tension reducing agent for bubble-free investing of wax patterns.

Wax-Lite surface tension reducing agent
750 ml
REF 520 0100 8





Wax surfaces that are coated with the tension reducing agent allow flowing of the investment material into very small cavities of the model. This results in smooth, homogeneous surfaces and perfect occlusal surfaces. With the spray bottle micro-fine layers of Wax-Lite can be applied on the wax surface.

Silicone and wax surface tension reducing agent



Improves the flow characteristics of plaster on silicone impressions.
Spraying on silicone and wax tension reducing agent will improve the flow characteristics of plaster for silicone impressions. The impression must be dry before the arch is poured.

Silicone and wax surface tension reducing agent
750 ml
REF 540 0070 5



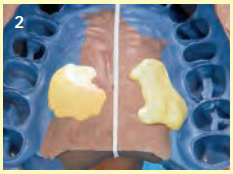
The fine spray head of the plastic spray bottle simplifies spraying uniform quantities of the agent.

Accessories:

Spray bottle, plastic sp
1 piece, 125 ml
REF 540 0075 0



The spraying head of the spray bottle simplifies uniform wetting of the surface with silicone and wax surface tension reducing agent.



After the application of the agent onto the surface (left), the flow characteristics of the plaster have been clearly improved.



Silicone and wax surface tension reducing agent produces a homogeneous plaster surface. This will ensure precise dental work.

Mould release agent



Mould release agent
125 ml
REF 520 TM12 5



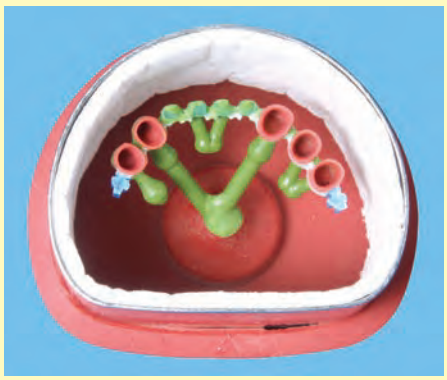
Allows the investment material residue to be removed with from the silicone shape.To preserve and store the silicone moulds, simply spray on release agent and let dry.

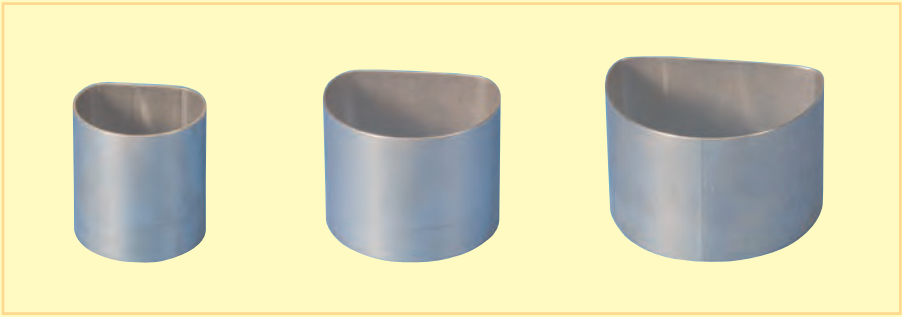
Refill package
750 ml
REF 520 TM75 0

Metal muffle rings

Steel ring adapted to the shape of the arch

Semi-round steel rings allow positioning the castings outside the center of heat. The stress-free castings can be easily fitted and allow to continue working quickly.





Steel rings for SX3, SX6 and SX9, compatible with all standard casting machines – familiar procedures can be used.

Large-span rounded bridges are always invested outside the center of heat.

Steel ring

	SX3	SX6	SX9
REF	**360 ESR0 3**	**360 ESR0 6**	**360 ESR0 9**

Base former for steel ring

	SX3	SX6	SX9
REF	**360 ESS0 3**	**360 ESS0 6**	**360 ESS0 9**



Metal-reinforced silicone base formers for high stability.

Assortment

12 pieces
1 steel ring SX3, SX6, SX9 each
1 base former SX3, SX6, SX9 each
1 fleece liner SX3, SX6, SX9

20 ml wash primer for fleece
200 ml wash primer - refill package
125 ml mould release agent
REF 360 ESSE T

Accessories:



Mould release agent
125 ml
REF 520 TM12 5
750 ml
REF 520 TM75 0

Fleece liners



These fleece liners do not absorb moisture from the investment material; hence uniform expansion of the investment material and high accuracy are ensured.



Precut fleece liners for sizes SX3, SX6 and SX9 for easier processing.

Sizes	SX3	SX6	SX9
Quantity	200 pieces	100 pieces	50 pieces
REF	**360 ESV0 3**	**360 ESV0 6**	**360 ESV0 9**

Wash primer for fleece



Wash primer
20 ml
REF 520 HG02 0



Refill package
200 ml
REF 520 HG20 0



The wash primer to glue the fleece liners in the muffle ring avoids the penetration of investment material and simplifies devesting.

Silicone muffle rings

Silicone rings made from addition-cured silicone are poor heat conductors. During setting of the investment material, the accumulated heat causes quick increase in temperature and leads to a higher final temperature. Stronger expansion movement is obtained. Tolerances are reduced and the precision of investment material is increased. The silicone sleeve ensures uniform expansion pressure, increases precision and produces reliable results. The high-quality silicone can be easily cleaned and features special durability.

A central aspect during cooling and solidification of the liquid molten mass is the position of the prosthetic object towards the outer wall of the muffle. bredent casting technique offers the suitable design of investment muffles to always position the object outside the center of heat.



The bridge is positioned in the center of heat.

Thanks to the mould design, all bridge moulds are positioned outside the center of heat to obtain a homogeneous casting structure.

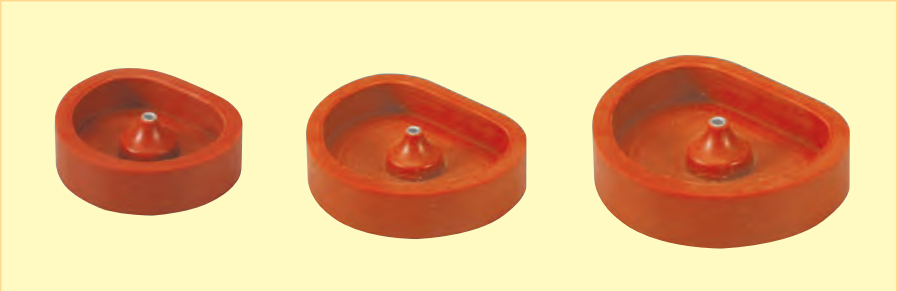
Silicone sleeve

	SX3	SX6	SX9
REF	**360 SIM0 3**	**360 SIM0 6**	**360 SIM0 9**



Base former for silicone sleeve

	SX3	SX6	SX9
REF	**360 SIS0 3**	**360 SIS0 6**	**360 SIS0 9**



Sortiment

7 pieces
1 silicone sleeve SX3, SX6, SX9 each
1 base former SX3, SX6, SX9 each
125 ml mould release agent

REF 360 SISE T

Accessories:



Mould release agent
125 ml
REF 520 TM12 5
750 ml
REF 520 TM75 0

Vakuum Anrührsystem ecovac



ecovac

Precision-fit restorations obtained through optimal use of material properties.
The user-friendly and compact design simplifies work and reduces sources of errors. A powerful and maintenance-free vacuum pump, adjustable in two different levels (15 mbars, 200 mbars), ensures bubble-free mixing of materials and results in a perfect casting surface. Stirring time and speed can be adjusted continuously to allow correct processing of different materials.

ecovac (230 V) **REF 140 0093 0**

(Wall mounting, without mixing cup and base)
1 mains cable
1 spare filter
1 drilling template for wall mounting
4 screws and plugs for wall mounting

Accessories

Base ecovac, 1 piece **REF 210 0045 0**



ecovac mixing spiral

The mixing spiral takes up the components to be mixed from all areas of the mixing cup and stirrs them horizontally and vertically. No unmixed materials will remain on the bottom of the mixing cup, which may cause different expansion of the material later on.
All features and components listed provide increased reliability, lead to improved fit when preparing dental restorations and avoid time-consuming reworking.

Mixing spiral,	50 ccm	**REF 140 0R94 5**
Mixing spiral,	250 ccm	**REF 140 0R94 0**
Mixing spiral,	750 ccm	**REF 140 0R94 2**
Mixing spiral,	1000 ccm	**REF 140 0R94 3**



ecovac mixing cups

The smooth inner surface of the stainless steel mixing cup prevents any material or liquid residues from adhering to or depositing in scratches or undercuts. The conical shape ensures that material which has been taken up will flow back to the center of the mixing cup. Accordingly, the mixing ratio is retained exactly and better results can be achieved with minimal effort.

Mixing cup,	50 ccm	**REF 140 0B94 5**
Mixing cup,	250 ccm	**REF 140 0B94 0**
Mixing cup,	750 ccm	**REF 140 0B94 2**
Mixing cup,	1000 ccm	**REF 140 0B94 3**



Mixing cup, D
(for the use in the Degussa mixing unit),
425 ml **REF 140 0B94 4**

Brevest C+B Speed



Brevest C+B Speed
50 bags, 160 g each
REF 570 CBS0 8

125 bags, 160 g each
REF 570 CBS2 0

Bresol Speed *
1000 ml bottle
REF 520 000S 1

5000 ml
REF 520 000S 5

* frost-resistant

Assortment

25 bags
Brevest C+B Speed
1000 ml Bresol Speed
REF 570 CBS0 4

Very fine-grained, phosphate-bonded investment materials for crowns and bridges made of precious and non-precious metal alloys featuring outstanding reproduction of details.



At a room temperature of 21°C a processing time span of 4 to 6 minutes is obtained for bubble-free pouring out of casting rings.



Highly accurate and dimensionally precise large-span bridges are produced with Brevest M1 C+B and Brevest C+B Speed.

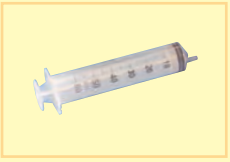


Exact control of concentrations for precision-fit dentures is possible with the frost-resistant mixing liquids Bresol N and Bresol Speed.

Accessories:



Dosing bottle
REF 520 0101 1



Dosing syringe
6 pieces
REF 520 0101 2

Brevest Rapid 1



Rapid-heating, universal precision investment material for crowns and bridges as well as the entire field of CoCr work.

Brevest Rapid 1
40 bags, 200 g each
REF 570 000R 8

100 bags, 200 g each
REF 570 00R2 0

Brevest Rapid 1
50 bags, 160 g each
REF 570 160R 8

125 bags, 160 g each
REF 570 16R2 0

Bresol R
1000 ml bottle
REF 520 000R 1

5000 ml
REF 520 000R 5

Assortment

20 bags
Brevest Rapid 1
1000 ml Bresol R
REF 570 0002 5



Fine grained, rapid-heating precision investment material for all large-span bridges, can also be used without casting rings.

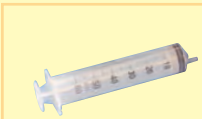


Brevest Rapid 1 can be placed into the furnace at a temperature of 900 °C already 15 minutes after mixing.

Accessories:

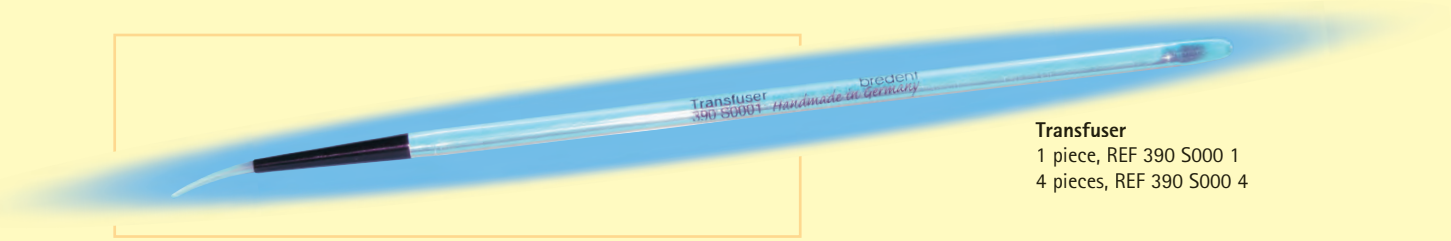


Dosing bottle
REF 520 0101 1



Dosing syringe
6 pieces
REF 520 0101 2

Transfuser

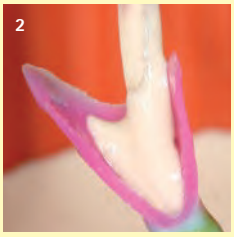


Transfuser
1 piece, REF 390 S000 1
4 pieces, REF 390 S000 4

Gentle and safe transfer of investment compound and gypsum
While investing and casting an impression, quite frequently air gets entrapped - especially in narrow and inverse areas - which may cause undesired bubble formation. So far it was merely possible to utilize instruments and brushes for the preparation. But sharp-edged instruments bear the risk of damaging both modellation and impression. While using brushes, it is possible to transfer excess fluids, and if the brush is rather dry it may withdraw some moisture. Both may affect the expansion behavior of investment compounds.
The curved and flexible silicone tip of the Transfuser allows a gentle, damage- and bubble-free application prior to standard filling procedures. The smooth and dense surface provides excellent gliding characteristics for gypsums and investment compounds, and thus a bubble-free material transfer.



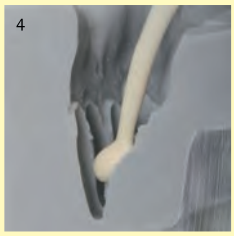
Highly flexible, soft tip and thus no risk of damaging the wax model.



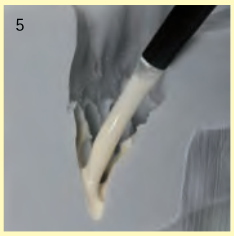
Narrow areas are thoroughly filled by gentle application without modellation damage.



Optimal material flow and bubble-free condensation with the Transfuser.



Smooth and gentle filling of extreme hollows with gypsum in case of silicone impressions.



No risk of damage during the filling process.



Each area is well accessible and allows for optimal and bubble-free material distribution.

Investment marker



Helps with the positive identification of investment muffles.

Investment marker
REF 330 0115 0



The necessary information is noted down quickly and easily.



The marker can be clearly read on all investment materials up to 1100 °C.

Casting ring marker



Casting ring marker
1 marker with 4 spare cartridges
REF 330 0115 1

Refill package with 8 cartridges
REF 330 0115 2

For correct identification of casting rings.

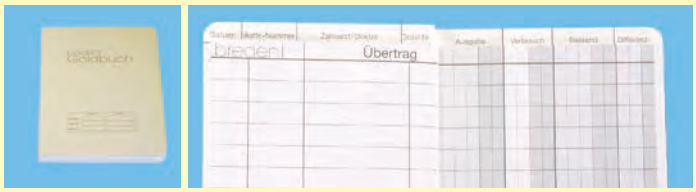


Comprehensive information even on the smallest of rings.



The positive identification is assured up to 950° C.

Golden booklet



Golden booklet
DIN A 6
REF 610 0020 0

Thanks to the clear and simple structure of the golden booklet, reliable stock-keeping of precious metal alloys is ensured. The booklet simplifies the control and provides a quick survey on the consumption of alloys.



Golden booklet
DIN A 4
REF 610 0010 0

Brealloy C+B 270



Brealloy C + B 270
cylinder, each 6.3 g

50 g
REF 500 CB05 0

200 g
REF 500 CB20 0

500 g
REF 500 CB50 0

1000 g
REF 500 CB00 0

Ceramic bonding alloy with a hardness of 270 HV 10 which can be milled easily. Brealloy C + B 270 is free from nickel, beryllium and gallium. The alloy corresponds to the standard DIN 13912: 1996 for non-precious metals and DIN EN ISO 9693: 1995 for metal-ceramic systems.

Composition (in mass-%)	
Cobalt	66
Chromium	20
Molybdenum	6
Wolfram	6
Silicone	0.9
Carbon	0.02
Manganese	0.7

Physical values (guide values)	
Density (g/cm³)	8.4
Vickers hardness (HV 10)	270
Solidus point (°C)	1280
Liquidus point (°C)	1350
Casting temperature (°C)	1450
0.2% proof stress (MPa)	600
Modulus of elasticitiy (MPa)	approx. 200,000
Strain at break (%)	10
Espansion coefficient (WAK 20-600 °C)	14.4 µm/mk



Milling technique: Brealloy C + B 270 can be milled perfectly.



Partial crowns made of Brealloy C + B 270: slender and precise.



Attachment technique with Brealloy C + B 270: precision in the one-piece casting method.

Brealloy MK



brealloy MK
50 g
REF 500 MK05 0

200 g
REF 500 MK20 0

500 g
REF 500 MK50 0

1000 g
REF 500 MK00 0

Solderable CoCr based alloy for crown and bridge technology. The low hardness permits easy processing. It is therefore ideal for milling. brealloy MK is free from nickel, beryllium and gallium.

Composition (in % of mass)	
cobalt	65
chrome	20
molybdenum	6.5
tungsten	6.5
silicon	0.8
manganese	0.8
iron	<0.5
carbon	<0.1

Physical properties (guide values)	
density (g/cm³)	8.4
Vickers hardness (HV 10)	265
solidus point (°C)	1280
liquidus point (°C)	1350
casting temperature (°C)	1420
0.2% yield point	480
tensile strength (N/mm²)	790
E-module (mPa)	190,000
Elongation at break (%)	10
Coefficient of expansion (WAK 20-600°C)	14.8 µm/mK



The low hardness facilitates milling, shaping and polishing.



Ideally suited for longer bridges.

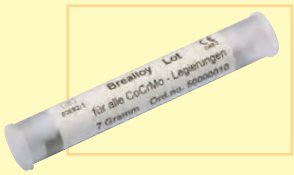


Even inlays with fine spring tips can be easily produced.



The low hardness creates ideal conditions for milling and is thus highly suitable for all types of attachments.

Brealloy Lot



Brealloy Lot
7 g
REF 500 0001 0

Solder especially matched with CoCr alloys for chrome cobalt and ceramic bonding techniques to avoid the formation of galvanic elements and undesired reciprocal action with the ceramic material.

Brealloy flux



Brealloy flux
8 g
REF 500 0001 1

Suitable for all CoCr alloys,
supports the flow characteristics of the solder.

bredent group
Telephone (+49) 0 73 09 / 8 72-4 40

Oxyd-Stop-PM



Oxyd-Stop-PM
20 ml
REF 520 0065 0

Thinner
20 ml
REF 520 0067 0

Prevents polished, precious and semi-precious alloy surfaces oxidizing while being soldered with a flame or in a furnace and while firing porcelain.



Oxyd-Stop-PM maintains the high luster. No refinishing is required.



Refinishing oxidized surfaces reduces the material and may adversely affect the precision of fit.

Oxyd-Stop-PM – Range of Applications



Oxyd-Stop-PM prevents precious metal crowns and bridges from oxidizing during soldering. Also suitable for Wiron 88.



Safeguards high grade milled attachement restorations against oxidization while porcelain is being fired.



Perfect for post-soldering porcelain bridgework. The high luster metal surface is protected.



Shake the Oxyd-Stop-PM well and brush it onto the areas to be protected. Allow briefly to dry. The surface is now optimally protected against oxidation.



Always apply a fresh coat of Oxyd-Stop-PM after the casting has been heated. Only then is optimum protection against oxidation provided.



After firing or soldering, the protective layer is easily removed with hot water or steam cleaner.



Refinishing is reduced to a minimum, which saves time and enhances the quality.

Oxyd-Stop-NPM



Prevents oxidation while soldering all chrome cobalt and non-precious alloys. This reduces refinishing to a minimum and saves time.

Oxyd-Stop-NPM
2 x 50 ml
REF 520 0061 0



Oxyd-Stop-NPM protects non-precious bridges or single crowns against oxidation. The high luster surfaces are maintained.



Oxyd-Stop-NPM is perfect for use on chrome cobalt frameworks. Repairs and extensions can then be completed even faster.



When using Oxyd-Stop-NPM, the metal surface has the same high luster after soldering as it had after polishing.



Apply Oxyd-Stop-NPM direct from the tube onto the areas being protected. The dispensing tip facilitates this procedure.



Use an instrument to spread the Oxyd-Stop-NPM evenly.



Oxyd-Stop-NPM effectively prevents oxidation while soldering with a flame. High luster areas remain free of oxides and retain their precision of fit.



After soldering, Oxyd-Stop-NPM can be brushed off easily and quickly under running water. This saves time.



The surfaces only require minimal polishing to restore their high luster. Only the exposed crown has oxidized.

Oxyd-Stop Silver-Palladium alloy



Oxyd-Stop Silver-Palladium alloy
20 ml
REF 520 0033 0

Avoids oxidizing of silver-palladium and reduced alloys. No reworking required and thus time is saved.



Apply a thin coat of Oxyd-Stop Silver-Palladium onto the areas to be protected and let it dry. A white protective layer is formed.



Oxyd-Stop Silver-Palladium avoids the oxidation of the soldering object while being soldered with a flame or in a furnace.



Remove Oxyd-Stop with the sandblasting unit, in the ultrasonic unit or with a pickling agent. Repolishing of the protected areas is reduced to a minimum degree.

Heat absorbent paste



There is no better method of protecting against heat.

Heat absorbent paste
250 g
REF 540 0020 0



Apply the heat absorbent paste very close to the joint.



Acrylic, porcelain or other heat-sensitive materials are no longer harmed by heat.



This paste will not melt when warmed.

Brecid pickling agent



For the first time ever, precious metal retains its high luster after pickling

Brecid pickling agent
3 x 75 g
REF 520 0099 0



Shows a contact area being soldered onto a full gold crown, polished to a high-luster.



Pickling precious metals in Brecid removes the oxide yet leaves the high-luster intact therefore saving time.

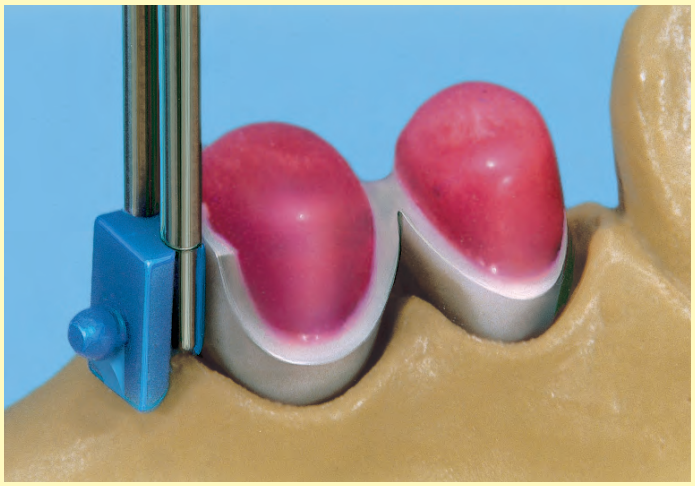


Although conventional pickling agent does remove the oxide, it also dulls the high luster achieved with great effort.

bredent group

Telephone (+49) 0 73 09 / 8 72-4 40

Anchoring elements for secure hold of the prosthesis gives patients a better quality of life. bredent therefore offers a variety of anchoring elements for various indications, from stud and rod attachments, various bar variants, locks and screws for dentist-removable dental prostheses.







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Brochures for dentists and patients

Help to make you and your dentist more successful with these brochures!



Vario-Soft product range
The different types of attachments of the Vario-Soft attachment group and their advantages are illustrated in detail in this brochure. This will provide dentists with a better survey on the variety of attachments so that patients will receive more qualified advice and high quality restorations.
REF 000 041G B



A healthy mouth - for your whole life
The biofilm in which the bacteria are arranged in the mouth, constitutes the main risk to oral health in the long term. In particular if the pathogenic bacteria become out of control and inflammation occurs. HELBO treatment makes a scientifically-proven method of fighting these pathogenic bacteria available to the dentist - the bacteria are stained and killed using a suitably coordinated Theralite laser. This brochure explains the combination and possibilities of the treatment to the patient in a straight forward manner.
REF 000 484G B

Patient brochures for implantology
bredent medical offers various patient brochures for implant restoration, in order to meet the different requirements of patient groups.



...gapless...
This brochure gives young patients who are missing one or a few teeth an overview of which options implantology offers for them and what they must take into consideration in the case of implant restoration.
REF 000 421G B

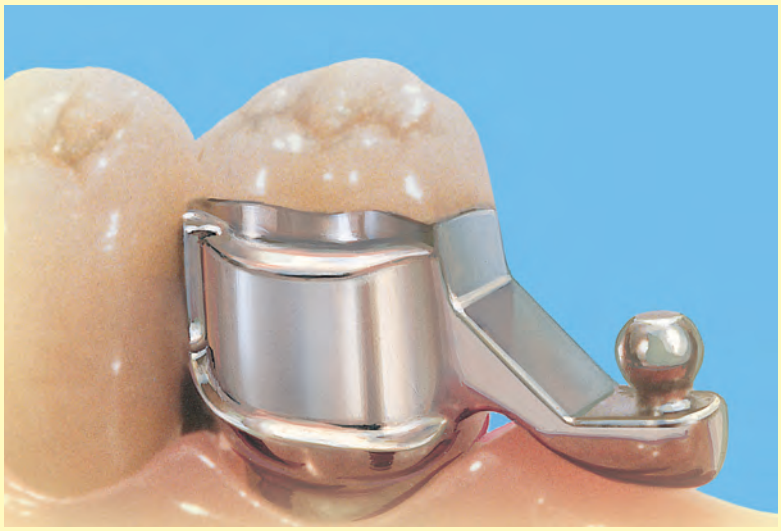


tempting...?
Patients who are on the verge of becoming edentulous are a special customer group. They feel they are too young for a total prosthesis and want a fixed restoration as soon as possible. The options of immediate restorations with the SKY fast & fixed treatment concept are set out in detail in these patient brochures.
REF 000 342G B



...in the thick of it...
Patients who are already edentulous have different requirements again. These patients can already be helped a great deal by fixing their prosthesis to implants. These patient brochures show the possibilities of securely fixing removable restorations so that the patient is able to eat comfortably and socialise again happily.
REF 000 422G B

The brochures are available free of charge!



Important information for users of bredent attachments!

To ensure trouble-free and lasting function of the attachments, the stable position of the removeable denture is of utmost importance. A circumferential shoulder with parallel milled interlock at the abutment crown and a corresponding shear distributor at the removeable restorations are essential elements and indispensable. Tilting movements of the denture must be avoided since they result in frequent locking and unlocking of the snap attachments and - in conjunction with crystalline deposits - may cause premature wear and thus affect the proper function of the attachments.

bredent Research Information

Vario-Stud-Snap attachment vks oc + sg

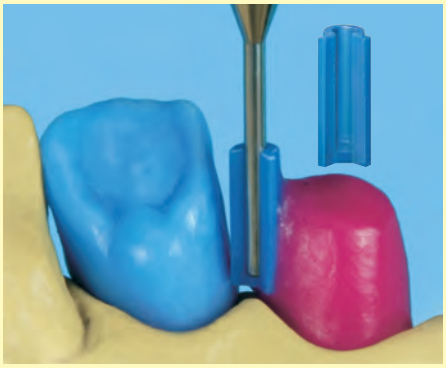
Latest findings have shown that in a very limited number of cases deposits may be formed on natural teeth, dentures and fixed restorations in the oral environment.

If, due to insufficient oral hygiene, these crystals are not removed, some exceptional cases of inclusion of these crystals in the surface of the plastic matrix might result.
This leads to an abrasive effect on the stud of the patrix resulting in the possible loss of snap. Very rare cases of this unexplained and previously unknown phenomenon have been reported for the Stud-Snap attachments sold (1 of 5000 patients).

Accordingly, we recommend the exclusive use of hard alloys and to clean the teeth, the denture and the fixed restoration two times a day as well as to have them regularly checked by the dentist. To ensure perfect function of the Vario-Stud-Snap attachment it is necessary that the patient acquires the snap point with his finger when inserting the denture and locks it by pressing on it with his finger.

Interlock





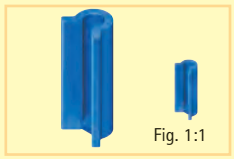
- **Fast and reliable attaching of the Interlock**
- **No damage to the die when drilling the Interlock**

- **Only drill with a groove bur**
- **Defined wall thickness of just 0.4 mm**

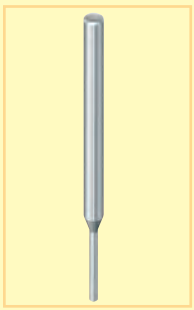
The Interlock is integrated into the model using the paralleling mandrel. Then the circular groove is modelled and milled.

Parallel- and 2°-Interlock made of high-melting special wax.
After determining the direction of insertion, the copings are produced (wax or resin).

Interlock parallel



8 pieces
REF 430 0736 9

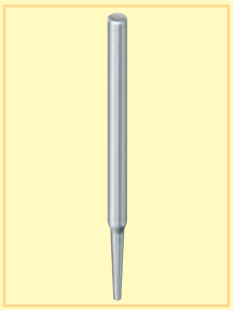


Paralleling mandrel Interlock, parallel
1 piece
REF 360 0116 6

Interlock 2°



8 pieces
REF 430 0736 8



Paralleling mandrel Interlock 2°
1 piece
REF 360 0116 5



Fast and correct attaching of the Interlock with shear distributor ensures quick reworking.



The Interlock is only re-drilled (reamed) with the groove bur F538 2H 10. The shear distributor is processed in the usual way.



A reliable and durable removeable denture is obtained, if the correct Interlock is selected.

Dimensions



Product	REF	Ø	Width	Height
Interlock 0°	430 0736 9	0.9 mm	2.2 mm	6.0 mm
Interlock 2°	430 0736 8	1.4 mm	1.0/1.4 mm	6.0 mm

vks-oc

Stud attachments must be processed very precisely for functionally-secure application. It must be possible to guarantee the positional stability of the prosthesis, in order to prevent overloading caused by micro movements of the matrix and the patrix. The attachment is only designed for secure hold of the prosthesis, it is not, however, for permanent weight-bearing. In the case of extracoronal use, a shear distributor with integrated Interlock must be available. The required stability and force distribution are thus achieved.
Due to its snap function, the stud attachment offers patients more security, as a clear snapping in of the prosthesis is noticeable.

Indications
- Root caps
- Extracoronal applications
- Retaining element for bars
- Implant prosthetics (only vks-oc rs)
- Plastic fitting
- Model casting fixation

Product variations
- Vario-Kugel-Snap vks-oc 1.7 uni for root caps and bar solutions
- Vario-Kugel-Snap vks-oc 2.2 uni for root caps and bar solutions
- Vario-Kugel-Snap vks-oc 1.7 for extracoronal application
- Vario-Kugel-Snap vks-oc 2.2 for extracoronal application
- Vario-Kugel-Snap vks-oc rs 2.2 for various implant systems
- Vario-Kugel-Snap vks-oc 1.7 exchangeable stud
- Vario-Kugel-Snap vks-oc 2.2 exchangeable stud

Properties
- Cost-effective purchase
- Time-saving and secure processing
- Reduction of the alloy variety for high biocompatibility
- Cost-effective solution provided by castable plastic patrices

Materials
- Patrices
  - Combustible plastic
  - Castable precious metal alloy
- Matrices
  - Biocompatible thermoplast

Dimensions
The Vario-Kugel-Snap vks-oc stud head attachments are available in sizes 1.7 and 2.2.

The matrices have a retention of

green 4N

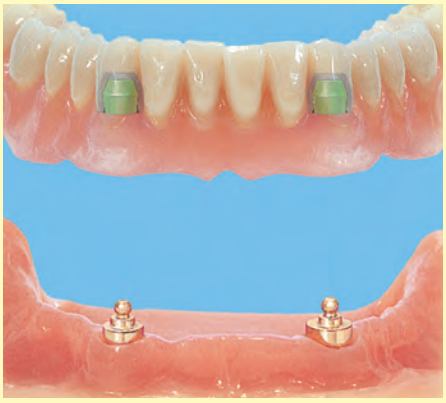


yellow 6N



red 8N

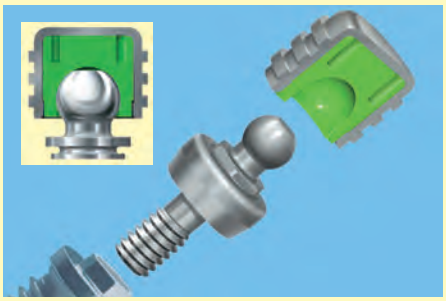




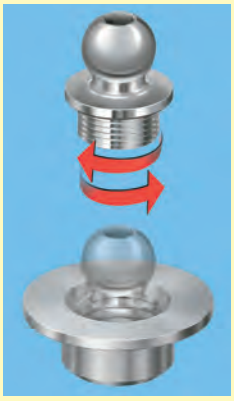
vks-oc 1.7/2.2 uni for root caps and bar solutions



vks-oc 1.7/2.2 for extracoronal application



vks-oc rs 2.2 for various implant systems



vks-oc 1.7 / 2.2 exchangeable stud



vks-oc rs 2.2 abutments

nine abutments suitable for Brånemark, 3i (except 6 mm) and Steri-Oss hex-lock

The patrix of the stud attachment has been produced with utmost precision in an industrial process. It consists of titanium, grade 5. This material guarantees precision of fit, high durability and biocompatibility.

In the area of the head the screw of the vks-oc stud abutment features a recess. This ensures gap-free fit of the abutment on all common implants with hexagon. Only the suitable diameter and the desired distance height have to be observed.

Fig. 1:1



vks-oc rs Ø 2.2 mm abutment
Ø 4 mm, distance height 2 mm
impression matrix
1 piece each
REF 460 0004 2



vks-oc rs Ø 2.2 mm abutment
Ø 5 mm, distance height 2 mm
impression matrix
1 piece each
REF 460 0005 2



vks-oc rs Ø 2.2 mm abutment
Ø 6 mm, distance height 2 mm
impression matrix
1 piece each
REF 460 0006 2



vks-oc rs Ø 2.2 mm abutment
Ø 4 mm, distance height 4 mm
impression matrix
1 piece each
REF 460 0004 4



vks-oc rs Ø 2.2 mm abutment
Ø 5 mm, distance height 4 mm
impression matrix
1 piece each
REF 460 0005 4



vks-oc rs Ø 2.2 mm abutment
Ø 6 mm, distance height 4 mm
impression matrix
1 piece each
REF 460 0006 4



vks-oc rs Ø 2.2 mm abutment
Ø 4 mm, distance height 6 mm
impression matrix
1 piece each
REF 460 0004 6



vks-oc rs Ø 2.2 mm abutment
Ø 5 mm, distance height 6 mm
impression matrix
1 piece each
REF 460 0005 6



vks-oc rs Ø 2.2 mm abutment
Ø 6 mm, distance height 6 mm
impression matrix
1 piece each
REF 460 0006 6



vks-oc rs Ø 2.2 mm
implant analogue
Ø 4 mm
2 pieces
REF 460 0000 4



vks-oc rs Ø 2.2 mm
implant analogue
Ø 5 mm
2 pieces
REF460 0000 5



vks-oc rs Ø 2.2 mm
implant analogue
Ø 6 mm
2 pieces
REF 460 0000 6

Accessories:



Screwdriver is
elbow
1 piece
REF 460 0001 0



Screwdriver is
manual, short
1 piece
REF 460 0001 1



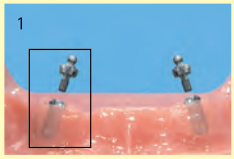
Angle measuring device
1 piece
REF 460 0010 0



vks-oc rs Ø 2.2 mm axle abutment
2 pieces
REF 460 0010 2
8 pieces
REF 460 0010 8

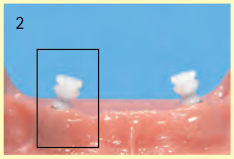


Impression matrix
2 pieces
REF 460 0000 2
8 pieces
REF 460 0000 8



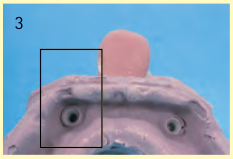


After successful osseointegration of the implant, the mucous membrane is opened and the suitable vks-oc abutment is screwed in. The torque must be limited to 30 Ncm by using a vks-oc screwdriver.





Abutments in the distance heights of 2, 4 and 6 mm are available. Distance sleeves are not required. The stud abutments can also be used as gingiva former. Prior to taking the impression, place the transfer matrices onto the stud abutments.





The transfer matrices are now in the total impression. Retention grooves ensure the firm position of the transfer matrices in the impression material.

Important information about processing of attachments, see catalogue page 133

vks-oc rs 2,2 abutments



Prior to the fabrication of the model, laboratory implants are inserted into the tranfer matrices. This way precise transfer of the position of the implants is guaranteed.



The model precisely shows the position of the implants. Normally, the implants have not been inserted in an entirely parallel position to each other so that divergences or convergences between several stud abutments result.

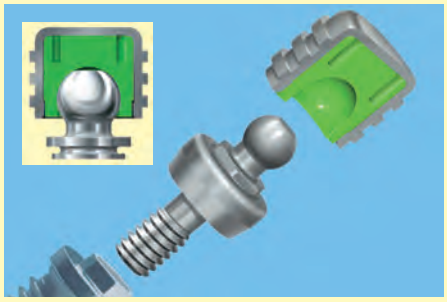


The vks-oc system accepts maximum deviations of 15 ° to the planned angle of insertion. To determine the deviation from the vertical axle, axle abutments are placed onto the abutment analogue.



A special angle measuring device represents the range of tolerance of the vks-oc system. In this example the deviation of the implants lies within the range of tolerance. Accordingly, supply with the vks-oc rs system is possible.

Rigid matrices for fixation in an acrylic denture



Assortment

13 pieces
2 Rigid matrices, green
2 Rigid matrices, yellow
2 Rigid matrices, red
2 Matrix housing for fixation in acrylics
2 Screwdriver is
1 Angle measuring device
1 Matrix inserting instrument
1 vks paralleling mandrel

REF 440 0066 4



Rigid matrices
vks-oc rs Ø 2.2 mm
green – reduced soft-snap-in effect
8 pieces
REF 440 0070 8

50 pieces
REF 440 0075 0



Rigid matrices
vks-oc rs Ø 2.2 mm
yellow – medium soft-snap-in effect
8 pieces
REF 440 0080 8

50 pieces
REF 440 0085 0



Matrix housing for fixation in acrylics
vks-oc rs Ø 2.2 mm
2 pieces
REF 440 0030 2

8 pieces
REF 440 0030 8



Rigid matrices
vks-oc rs Ø 2.2 mm
red – high soft-snap-in effect
8 pieces
REF 440 0090 8

50 pieces
REF 440 0095 0

Accessories:



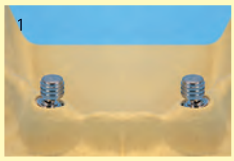
Matrix inserting instrument
vks-oc rs Ø 2.2 mm
1 piece
REF 360 0116 1



Paralleling mandrel universal 2
vks-oc rs Ø 2.2 mm
1 piece
REF 360 0116 0



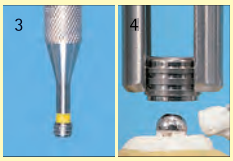
Matrix pliers
vks-oc Ø 2.2 mm + zg
1 piece
REF 310 0000 6



The matrices should be placed onto the divergent abutments so that parallel direction of insertion is ensured. For this purpose the procedure in figures 3 – 9 must be adhered to.



Orientation of the matrices at the axles of the implants would result in a divergent position of the matrices. The function of the matrices would be affected.



Press the yellow plastic matrix (resilient or rigid) into the metal housing using the inserting instrument. The paralleling mandrel is used to achieve parallel placement of all matrices on the abutments.



Fix the position of the matrices with plaster; fill undercuts up to the jaw ridge. The plaster base ensures correct position of all matrices during subsequent working steps.



To set up the teeth, use an acrylic base plate. The matrices are integrated into the base plate using a small amount of acrylic. The teeth are set up on this plate.



For try-in the matrices and the set-up can be removed from the model. Due to the plaster base (cf. fig. 5) the parallel position of the matrices is ensured so that it can be reproduced easily.



Prior to the completion, remove the matrices from the base plate and place them on the abutments. All techniques (e.g. flask pressing technique, casting technique) can be used for completion.



The matrix housing polymerized in the acrylic material: The plastic matrix can be removed with the matrix pliers. The rigid matrices can be exchanged for the resilient ones (and vice versa) at any time.

vks-oc rs 2,2 abutments

Rigid matrices for fixation in a CoCr structure



vks-oc rs Ø 2.2 mm
Processing of the matrix on the abutment


Fig. 1:1

Rigid matrices
vks-oc rs Ø 2.2 mm
green – reduced soft-snap-in effect
8 pieces
REF 440 0070 8

50 pieces
REF 440 0075 0


Fig. 1:1

Rigid matrices
vks-oc rs Ø 2.2 mm
red – high soft-snap-in effect
8 pieces
REF 440 0090 8

50 pieces
REF 440 0095 0


Fig. 1:1

Wax matrix housing
vks-oc rs 2.2 mm
8 pieces
REF 440 0100 8

50 pieces
REF 440 0105 0



Matrix pliers
vks-oc Ø 2.2 mm + zg
1 piece
REF 310 0000 6

Accessories:



DTK-adhesive
REF 540 0010 6


Fig. 1:1

Rigid matrices
vks-oc rs Ø 2.2 mm
yellow – medium soft-snap-in effect
8 pieces
REF 440 0080 8

50 pieces
REF 440 0085 0


Fig. 1:1

Matrix housings
vks-oc rs 2.2 mm
for glueing or laser-welding
2 pieces
REF 440 0020 2


Fig. 1:1

Duplicating matrix
vks-oc rs 2.2 mm
8 pieces
REF 440 0110 8

Assortment

13 pieces
2 Rigid matrices, green
2 Rigid matrices, yellow
2 Rigid matrices, red
2 Matrix housings
2 Wax matrix housings
2 Duplicating matrix
2 Screwdriver is
1 Angle measuring device
1 Matrix inserting instrument
1 vks paralleling mandrel

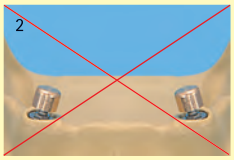
REF 440 0066 5

Important information about processing of attachments, see catalogue page 133

vks-oc rs 2,2 abutments



The matrices (duplicating matrix housing) should be placed onto the divergent abutments so that parallel alignment is ensured. For this purpose the procedure in figures 3 – 13 must be adhered to.



Orientation of the matrices at the axles of the implants would result in a divergent position of the matrices. The function and the durability of the matrices would be affected.



To ensure parallel position of the duplicating matrices, they are placed onto the patrices using the paralleling mandrel. Then the position of the matrices is fixed using plaster.



Fill undercuts between duplicating matrix and jaw ridge with plaster. The plaster base ensures the correct position of the matrices during all subsequent working steps.





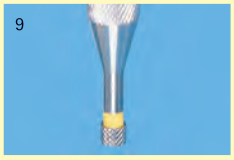
To produce a chrome cobalt framework, the model is blocked out and duplicated in the usual way. The duplicating matrix housing guarantees the correct size of the glueing gap.



In order to wax up the chrome cobalt framework over the matrix housings, special wax matrix housings are available. They ensure correct thickness of the chrome cobalt frame in the area of the matrices.



The chrome cobalt framework is cast, finished and polished according to standard criteria. The cavities to hold the glueing matrices should only be cleaned with a sandblasting unit (do not grind).



Press plastic matrices into the metal matrix housing using the inserting instrument. To glue the metal matrix housings, place them on the abutments.



The plaster bases, which were built up by parallel placement of the duplicating matrices (cf fig. 4) ensure parallel position of the metal matrix housing prior to glueing.



Clean the recesses for the glueing matrices with the sandblasting unit and fill with DTK-adhesive. Caution: Residues in sandblasting units with circulation affect the adhesion of the DTK-adhesive.



Press the chrome cobalt framework onto the glueing matrices which have been fixed in the correct positions. Press excess glue out of the recesses.



Then prepare wax set-up, try-in and complete acrylic denture in the usual way. Resilient and rigid matrices are inter-exchangeable at any time.

Dimensions



Product	REF	Thread	Distance height	Width	Ø Stud
vks-oc rs Ø 2.2 mm	460 0004 2	M2 x 0.4	2 mm	4 mm	2.2 mm
	460 0004 4	M2 x 0.4	4 mm	4 mm	2.2 mm
	460 0004 6	M2 x 0.4	6 mm	4 mm	2.2 mm
	460 0005 2	M2 x 0.4	2 mm	5 mm	2.2 mm
	460 0005 4	M2 x 0.4	4 mm	5 mm	2.2 mm
	460 0005 6	M2 x 0.4	6 mm	5 mm	2.2 mm
	460 0006 2	M2 x 0.4	2 mm	6 mm	2.2 mm
	460 0006 4	M2 x 0.4	4 mm	6 mm	2.2 mm
	460 0006 6	M2 x 0.4	6 mm	6 mm	2.2 mm

Dimensions



Product	REF	Ø	Height
Matrix housing for fixation in acrylics vks-oc rs 2.2	440 0030 8	4.2 mm	3.2 mm
Matrix housings for glueing vks-oc rs 2.2	440 0020 2	4.0 mm	3.2 mm
Duplicating matrix vks-oc rs 2.2	440 0110 8	4.4 mm	3.4 mm
Rigid matrices vks-oc rs 2.2	440 0070 8	3.3 mm	3.0 mm
	440 0080 8	3.3 mm	3.0 mm
	440 0090 8	3.3 mm	3.0 mm

vks-oc extracoronal use - fixation in the CoCr structure



The extracoronal vks-oc must always be used in conjunction with a milled shear distributor. This way optimal transfer of resulting forces onto the anchor tooth is ensured.
vks-oc is available in two different angles to allow optimal adaptation to the course of the gingiva.



Patrix vks-oc
Ø 1.7 mm, 30°
8 pieces
REF 430 0734 5
50 pieces
REF 430 0734 6



Patrix vks-oc
Ø 2.2 mm
8 pieces
REF 430 0539 0
50 pieces
REF 430 0556 0



Patrix vks-oc
Ø 1.7 mm, 60°
8 pieces
REF 430 0734 7
50 pieces
REF 430 0734 8

Accessories:



vks Paralleling mandrel oc/sg
1 piece
ph-vks 1.7
REF 430 0677 0
ph-vks 2.2
REF 360 0113 0

Assortment

12 pieces
Vario-Stud-Snap vks-oc 2.2 30°
REF 430 0531 0

Assortment

22 pieces
Vario-Stud-Snap vks-oc 1.7 30°/60°
4 Blocking out discs oc 1.7
1 Inserting instrument vks 1.7
4 Matrices oc 1.7 each - yellow, green, red
1 Paralleling mandrel metal ph-vks 1,7
2 Patrices oc 1.7 each 30° + 60°
REF 430 0734 9

Assortment

12 pieces
Vario-Stud-Snap vks-oc 2.2
2 Blocking out discs oc 2.2
1 Inserting instrument vks 2.2
2 Matrices oc 2.2 each - yellow, green, red
2 Patrices oc 2.2
1 Paralleling mandrel metal ph-vks 2.2
REF 430 0531 0

Assortment

10 pieces
Vario-Stud-Snap vks-oc 2.2
2 Blocking out discs oc 2.2
2 Matrices oc 2.2 each - yellow, green, red
2 Patrices oc 2.2
REF 430 0534 0



At the beginning a crown is waxed up in the usual way and a milled shear distributor with groove is prepared in wax.



Select the suitable vks-oc according to the course of the papillae and bring it into the correct position using the paralleling mandrel.



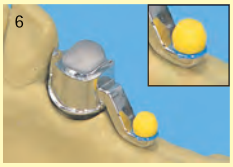
Fix vks-oc at the crown using hot wax.



The transition zone of vks-oc/crown must be coated richly with hot wax. vks-oc patrices consist of burnout plastic. They are cast together with the crowns.



The one-piece castin failitates processing. After casting, the vks-oc is only slightly polished to high lustre using a buff.



The extracoronal vks-oc patrices are assembled in the chrome cobalt framework in a very easy manner.

Dimensions



Product	Ø	Angle	Length	Height
Patrix vks-oc	Stud 1.7 mm	30°	5.8 mm	3.9 mm
	Stud 1.7 mm	60°	6.6 mm	6.6 mm
	Stud 2.2 mm	–	6.7 mm	7.5 mm

Important information about processing of attachments, see catalogue page 133

vks-oc extracoronal use - fixation in the CoCr structure



Accessories:



Matrix inserting instrument
vks-oc Ø 1.7 mm
1 piece
REF 430 0621 0



Metal transfer patrices
vks-oc Ø 1.7 mm
8 pieces
REF 430 0662 0



Matrix inserting instrument
vks-oc Ø 2.2 mm
1 piece
REF 430 0548 0



Metal transfer patrices
vks-oc Ø 2.2 mm
8 pieces
REF 430 0548 2



Matrices vks-oc 1.7
red – high soft-snap-in effect
8 pieces
REF 430 0656 0
50 pieces
REF 430 0657 0



Matrices vks-oc 1.7
yellow – medium soft-snap-in effect
8 pieces
REF 430 0659 0
50 pieces
REF 430 0658 0



Matrices vks-oc 1.7
green- reduced snap
8 pieces
REF 430 0655 0
50 pieces
REF 430 0654 0



Blocking out discs
vks-oc 1.7
8 pieces
REF 430 0652 0
50 pieces
REF 430 0653 0



Matrices vks-oc 2.2
red – high soft-snap-in effect
8 pieces
REF 430 0546 0
50 pieces
REF 430 0548 3



Matrices vks-oc 2.2
yellow – medium soft-snap-in effect
8 pieces
REF 430 0545 0
50 pieces
REF 430 0549 0

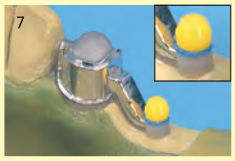


Matrices vks-oc 2.2
green- reduced snap
8 pieces
REF 430 0544 0
50 pieces
REF 430 0548 4



Blocking out discs
vks-oc 2.2
12 pieces
REF 430 0540 0
50 pieces
REF 430 0548 5

vks-oc Ø 1.7 mm and vks-oc Ø 2.2 mm: assembly in chrome cobalt framework



Block out to the basal direction starting from the blocking out disc. This way the perfect recess in the chrome cobalt framework to hold the matrix is obtained.



Then produce duplicate with chrome cobalt investment material.



Wax pattern of the planned chrome cobalt supply: the matrix is coated with a wax layer (thickness approx. 0.4 mm).



The completed chrome cobalt framework is ready for the assembly of the matrix with the inserting instrument.



The matrix is mounted with the special inserting instrument. Retention is ensured due to the conical outer shape. To exchange the matrix use a round bur or the matrix pliers.

Dimensions

Product	Ø	Height
Matrix vks-oc 1.7	2.7 mm	2.0 mm
Matrix vks-oc 2.2	3.3 mm	2.7 mm
Blocking out disc vks-oc 1.7	2.8 mm	0.4 mm
Blocking out disc vks-oc 2.2	3.5 mm	0.4 mm

vks-oc uni



For root caps and bars.

vks oc uni in burnout plastic are cast together with the root cap. They can be processed easily and are particularly biocompatible since there is no electrochemical potential difference caused by a different alloy.

vks-oc uni are also available in a cast-on, high-melting alloy. They are particularly precise since reworking after casting is no longer required.



Patrix vks-oc uni
Ø 1.7 mm
8 pieces
REF 430 0676 0
50 pieces
REF 430 0675 0



Patrix vks-oc uni
Ø 2.2 mm
8 pieces
REF 430 0538 0
50 pieces
REF 430 0550 0



Patrix vks-oc uni
Ø 1.7 mm
HL-patrix
cast-on
2 pieces
REF 430 0701 0

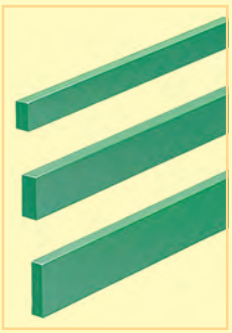


Patrix vks-oc uni
Ø 2.2 mm
HL-patrix
cast-on
2 pieces
REF 430 0700 0

Accessories:



vks Paralleling mandrel oc/sg
1 piece
ph-vks 1.7
REF 430 0677 0
ph-vks 2.2
REF 360 0113 0



Wax bars wstg 1.6
1.6 x 8 x 50 mm
approx. 65 pieces
REF 430 0265 0

Wax bars wstg 1.9
1.9 x 4 x 50 mm
approx. 120 pieces
REF 430 0266 0

Wax bars wstg 2.2
2.2 x 6 x 50 mm
approx. 65 pieces
REF 430 0267 0



Paralleling mandrel 1.9 - 2.2 for wstg 1.9 - 2.2
1 piece
REF 430 0270 0

Dimensions

Product	REF	Ø	Height
Patrix vks-oc uni/HL	430 0675 0	Stud 1.7 mm	2.2 mm
	430 0550 0	Stud 2.2 mm	3.2 mm

Important information about processing of attachments, see catalogue page 133

vks-oc uni



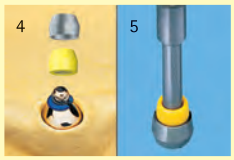
Root cap is modelled in the usual way. Bring the vks-oc uni into the correct position using the paralleling mandrel and fix with hot wax.



Remove paralleling mandrel and apply rich coat of hot wax onto the transition zone of vks-oc uni/root cap. The one-piece casting facilitates processing.



Casting is carried out according to standard criteria. After casting, the vks-oc unit is only slightly polished to high lustre using a textile buff.



The blue blocking out disc is placed onto the patrix below the equator. Plug the plastic matrix into the metal matrix housing using the inserting instrument.



Press the metal matrix housing with the plastic matrix onto the patrix. The blocking out disc ensures parallel position of the matrix.



For try-in, fix the metal matrix at the acrylic base plate using a small amount of acrylic.



Matrix housing in the set-up. The picture shows that only little space is required. For try-in, remove the blocking out discs.



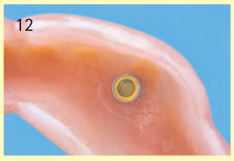
For completion, place on the blocking out disc and cover root cap with liquid silicone. Do not cover the occlusal part of the stud.



Press the metal matrix housing with integrated plastic matrix into the silicone that is still soft.



The denture is completed in the usual way after the silicone cover has hardened.



Basal view of completed denture: To change the snap friction, remove the plastic matrix with a round bur and insert a different plastic matrix.

Bar variation



Place a vks-oc uni in the correct position on a completely waxed-up bar using the paralleling mandrel and fix with hot wax.

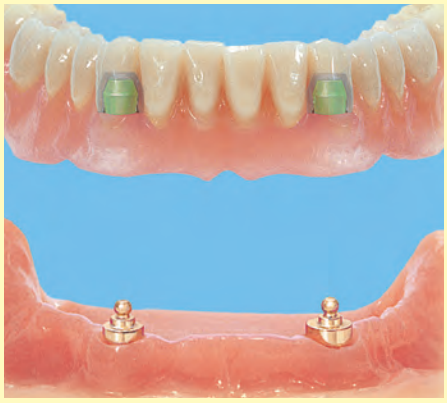


Remove paralleling mandrel and apply wax onto the transition zone of vks-oc uni/wax bar.



Casting is carried out in the usual way. vks-oc uni is only slightly polished to high lustre using a textile buff.

vks-oc uni



Rigid matrixes for fixation in an acrylic denture.


Fig. 1:1

Matrices red
vks-oc Ø 1.7 mm
high snap
8 pieces
REF 430 0656 0

vks-oc Ø 2.2 mm
8 pieces
REF 430 0546 0


Fig. 1:1

Matrices green
vks-oc Ø 1.7 mm
reduced snap
8 pieces
REF 430 0655 0

vks-oc Ø 2.2 mm
8 pieces
REF 430 0544 0


Fig. 1:1

Matrices yellow
vks-oc Ø 1.7 mm
medium snap
8 pieces
REF 430 0659 0

vks-oc Ø 2.2 mm
8 pieces
REF 430 0545 0


Fig. 1:1

Metal matrix housing
mmg vks-oc Ø 1.7 mm
2 pieces
REF 430 0697 0

8 pieces
REF 430 0661 0

mmg vks-oc Ø 2.2 mm
2 pieces
REF 430 0696 0

8 pieces
REF 430 0547 0

Accessories:



Matrix inserting instrument
vks-oc Ø 1.7 mm
1 piece
REF 430 0621 0



Metal transfer patrices
vks-oc Ø 2.2 mm
8 pieces
REF 430 0548 2


Fig. 1:1

Matrix housings tmg
vks-oc Ø 1.7 mm
2 pieces
REF 430 0699 0

vks-oc Ø 2.2 mm
2 pieces
REF 430 0698 0



Metal transfer patrices
vks-oc Ø 1.7 mm
8 pieces
REF 430 0662 0



Matrix inserting instrument
vks-oc Ø 2.2 mm
1 piece
REF 430 0548 0


Fig. 1:1

Blocking out discs
vks-oc Ø 1.7 mm
8 pieces
REF 430 0652 0

vks-oc Ø 2.2 mm
12 pieces
REF 430 0540 0

Assortment

Vario-Stud-Snap
vks universal 1.7
14 pieces
2 Matrices each red, yellow, green
2 Metal matrix housings
2 Blocking out discs
2 Patrices
1 Matrix inserting instrument
1 Paralleling mandrel

REF 430 0674 0

Assortment

Vario-Stud-Snap
vks universal 2.2
14 pieces
2 Matrices each red, yellow, green
2 Metal matrix housings
2 Blocking out discs
2 Patrices
1 Matrix inserting instrument
1 Paralleling mandrel

REF 430 0532 0

Note: Parallel alignment of vks-oc matrices (only rigid) and vks-oc rs matrices (either rigid or resilient) on root caps is always carried out using a blocking out disc. The processing methods of vks-oc matrices and vks-oc rs matrices are identical. vks-oc and vks-oc rs require different blocking out discs, matrix housings and inserting instruments.

Additional assortments can be found in the price list!

Dimensions

Product	REF	Ø	Height
Metal matrix housing vks-oc 1.7	430 0697 0	3.5 mm	2.3 mm
Matrix housings vks-oc 1.7	430 0699 0	3.5 mm	2.3 mm
Metal matrix housing vks-oc 2.2	430 0696 0	4.3 mm	3.1 mm
Matrix housings vks-oc 2.2	430 0698 0	4.3 mm	3.1 mm
Matrices vks-oc 1.7	430 0655 0	2.7 mm	2.0 mm
	430 0659 0	2.7 mm	2.0 mm
	430 0656 0	2.7 mm	2.0 mm
Matrices vks-oc 2.2	430 0544 0	3.3 mm	2.7 mm
	430 0545 0	3.3 mm	2.7 mm
	430 0546 0	3.3 mm	2.7 mm
Blocking out disc vks-oc 1.7	430 0652 0	2.8 mm	0.4 mm
Blocking out disc vks-oc 2.2	430 0540 0	3.5 mm	0.4 mm

Important information about processing of attachments, see catalogue page 133

vks-oc uni



Use on root caps for fixation in the CoCr structure.



Fig. 1:1

Patrix
vks-oc uni
Ø 1.7 mm
8 pieces
REF 430 0676 0
50 pieces
REF 430 0675 0



Fig. 1:1

Patrix
vks-oc uni
Ø 2.2 mm
8 pieces
REF 430 0538 0
50 pieces
REF 430 0550 0



Fig. 1:1

Patrix vks-oc uni
Ø 1.7 mm
HL-patrix
cast-on
2 pieces
REF 430 0701 0



Fig. 1:1

Patrix vks-oc uni
Ø 2.2 mm
HL-patrix
cast-on
2 pieces
REF 430 0700 0

Accessories:



vks Paralleling mandrel oc/sg
1 piece
ph-vks 1.7
REF 430 0677 0
ph-vks 2.2
REF 360 0113 0



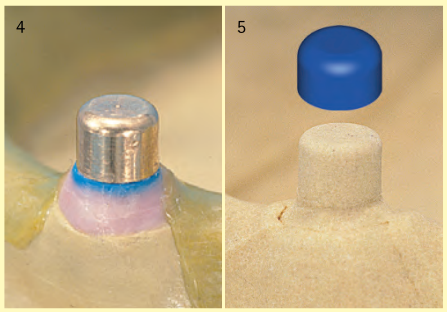
1 Root cap is modelled in the usual way. Bring the vks-oc uni into the correct position using the paralleling mandrel and fix with hot wax.



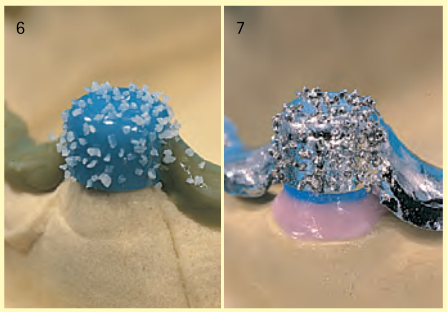
2 Remove paralleling mandrel and apply rich coat of hot wax onto the transition zone of vks-oc uni/root cap. The one-piece casting facilitates processing.



3 Casting is carried out according to standard criteria. After casting, the vks-oc unit is only slightly polished to high lustre using a textile buff.



4 5 Fill undercuts between the blocking out disc and the marginal line with blocking out wax and block out and duplicate the chrome cobalt framework in the usual way.



6 7 In order to wax up the chrome cobalt framework over the matrix housings, use the special wax matrix housings. They ensure correct thickness of the chrome cobalt frame. Complete the chrome cobalt framework in the usual way.

Dimensions

Product	REF	Ø	Height
Patrix vks-oc uni/HL	430 0675 0	Stud 1.7 mm	2.2 mm
	430 0550 0	Stud 2.2 mm	3.2 mm

vks-oc uni


Fig. 1:1

Rigid matrices
vks-oc rs Ø 2.2 mm
green – reduced soft-snap-in effect
8 pieces
REF 440 0070 8


Fig. 1:1

Rigid matrices
vks-oc rs Ø 2.2 mm
yellow – medium soft-snap-in effect
8 pieces
REF 440 0080 8


Fig. 1:1

Rigid matrices
vks-oc rs Ø 2.2 mm
red – high soft-snap-in effect
8 pieces
REF 440 0090 8


Fig. 1:1

Matrix housings
vks-oc rs 2.2
for glueing or laser-welding
2 pieces
REF 440 0020 2


Fig. 1:1

Wax matrix housing
vks-oc rs 2.2
8 pieces
REF 440 0100 8

50 pieces
REF 440 0105 0


Fig. 1:1

Blocking out discs
vks-oc rs 2.2
8 pieces
REF 440 0010 8


Fig. 1:1

Duplicating matrix
vks-oc rs 2.2
8 pieces
REF 440 0110 8



Matrix pliers
vks-oc Ø 2.2 mm + zg
1 piece
REF 310 0000 6

Assortment

Vario-Stud-Snap
vks-oc rs 2.2
18 pieces
2 Rigid matrices each, red, yellow, green
2 Matrix housings
2 Duplicating matrix inkl. 2 Matrices yellow
2 Wax matrix housing
2 Blocking out discs
2 Patrices
1 Matrix inserting instrument
1 Paralleling mandrel

REF 440 0001 0

Accessories:



Matrix inserting instrument
vks-oc rs Ø 2.2 mm
1 piece
REF 360 0116 1



Paralleling mandrel universal 2
vks-oc rs Ø 2.2 mm
1 piece
REF 360 0116 0



DTK-adhesive
REF 540 0010 6

Dimensions

Product	REF	Ø	Height
Matrix housings for glueing vks-oc rs 2.2	440 0020 2	4.0 mm	3.2 mm
Duplicating matrix vks-oc rs 2.2	440 0110 8	4.4 mm	3.4 mm
Blocking out disc vks-oc rs 2.2	440 0010 8	4.4 mm	0.75 mm

10 YEARS OF THE SKY IMPLANT SYSTEM
SUMMARISED IN THE 2012 SCIENTIFIC BOOK

INTERNATIONAL, FUTURE-ORIENTED, SCIENTIFIC AND PRACTICAL:

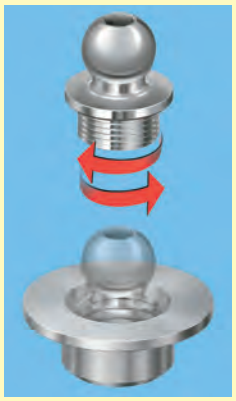
The three-part, 136-page long Scientific Book contains, in its first part, a summary of the abstracts of the presentations, Excellence courses and workshops that took place during the 2012 SKY Meeting and presents, in its second part, the scientific and clinical posters. The scientific posters show the latest results of the trials involving the SKY implant family (blueSKY, SKY classic, whiteSKY and miniSKY). Furthermore, results achieved using the HELBO treatment (aPDT) and the regeneration materials are presented. The clinical posters show the prosthetic possibilities of the SKY Implant System, miniSKY and whiteSKY, in connection with bredent materials. The conclusion in the third part provides an overview of specialist articles published nationally and internationally on the SKY Implant System and on the whiteSKY zirconium abutments.

The many authors and the bredent group are convinced that the 2012 Scientific Book will serve as a source of inspiration and invite you to gain an impression of the benefits that the many suggestions could have for you in your daily work.

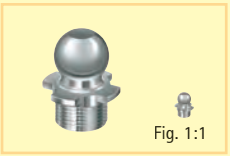


REF 9929740D (German)
REF 992974GB (English)

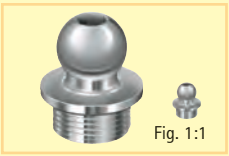
vks-oc exchangeable stud



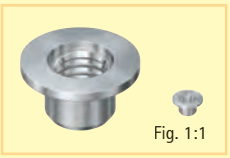
Safety, precision and biocompatibility due to easily exchangeable titanium stud.



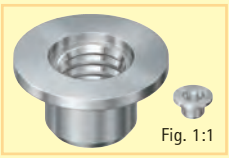
Stud-head screw vks-oc/sg 1.7 titanium
1 piece
REF 450 0005 6



Stud-head screw vks-oc/sg 2.2 titanium
1 piece
REF 450 0004 7



Thread sleeve vks-oc 1.7
1 piece
HL
REF 450 0005 4
platinum-iridium
REF 450 0005 5



Thread sleeve vks-oc 2.2
1 piece
HL
REF 450 0004 6
platinum-iridium
REF 450 0005 3

Assortment

vks-oc 1.7 exchangeable stud
5 pieces
1 Stud-head screw
1 Thread sleeve

1 Fixation screw
1 Screwdriver
1 Paralleling mandrel
REF 450 0005 8

Assortment

vks-oc 2.2 exchangeable stud
5 pieces
1 Stud-head screw
1 Thread sleeve

1 Fixation screw
1 Screwdriver
1 Paralleling mandrel
REF 450 0004 5

Accessories:



vks Paralleling mandrel oc/sg
1 piece
ph-vks 1.7
REF 430 0677 0
ph-vks 2.2
REF 360 0113 0



Screwdriver
short, hexagon
1 piece
REF 330 0069 0



Fixation screw
M 2
1 piece
REF 450 0004 8
M 1.6
1 piece
REF 450 0005 7



Screwdriver
Stud-head screw
vks oc/sg 1.7
1 piece
REF 330 0116 4



Tap vks exchangeable stud 1.7
1 piece
REF 460 0011 7



Tap vks exchangeable stud 2.2
1 piece
REF 460 0012 2

Important information about processing of attachments, see catalogue page 133

vks-oc exchangeable stud

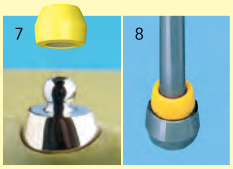




The stud-head screw is only slightly screwed into the thread sleeve and held to the root cap wax-up using the paralleling mandrel.



The attachment patrix is waxed to the wax model in the determined path of insertion.



Processing is continued using vks-oc 2.2 mm rigid matrices



The stud-head screw is turned out (anticlockwise) of the thread sleeve using the screwdriver.



Prior to investing the model, the stud-head screw must be replaced by the fixation screw.

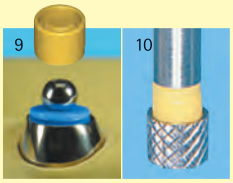




Colloid graphite is applied onto the thread area of the fixation screw; then the screw is turned into the thread sleeve exerting minimum force.



The casting is sand-blasted and the fixation screw is turned out. The root cap is finished, the stud-head screw turned in and polished to high lustre using titanium polishing paste.



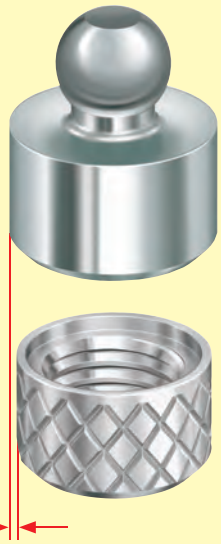
or vks-oc rs 2.2 mm rigid matrices.

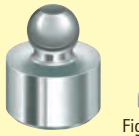
Dimensions



Product	REF	Ø	Thread	Height
Stud-head screw vks-oc/sg 1.7	450 0005 6	Stud 1.7 mm	M 1.6 x 0.2	2.9 mm
Stud-head screw vks-oc/sg 2.2	450 0004 7	Stud 2.2 mm	M 2 x 0.25	3.5 mm
Thread sleeve vks-oc 1.7	450 0005 4	3.4 mm	–	1.7 mm
Thread sleeve vks-oc 2.2	450 0004 6	3.4 mm	–	1.7 mm

vks-oc/sg exchangeable stud with adhesive sleeve





Auxiliary modelling element 1.7
1 piece
REF 450 0007 3



Auxiliary modelling element 2.2
1 piece
REF 450 0007 5



Thread sleeve titanium 1.7
2 pieces
REF 450 0007 4



Thread sleeve titanium 2.2
2 pieces
REF 450 0007 6

Accessories:



DTK-adhesive
REF 540 0010 6

One auxiliary modelling element for oc and sg.

The glue-in titanium thread sleeve as a low-cost alternative to the cast-on thread sleeve.



The auxiliary modelling element is integrated with the paralleling mandrel into the model according to the path of insertion.



The shape of the auxiliary modelling element allows to recognize the final alignment of the attachment.



Remove the auxiliary modelling element prior to investing.



After polishing, turn the stud-head screw into the thread sleeve and glue in the sandblasted seating using DTK adhesive.



Place the matrix on the stud-head screw and continue processing in the usual way.



Processing of vks-oc is carried out using the same auxiliary modelling element.

Dimensions



Product	REF	Thread	Height
Thread sleeve titanium vks-oc/sg 1.7	450 0007 4	M 1.6 x 0.2	1.9
Thread sleeve titanium vks-oc/sg 2.2	450 0007 6	M 2 x 0.25	1.9

vks-sg

Stud attachments must be processed very precisely for functionally-secure application. It must be possible to guarantee the positional stability of the prosthesis, in order to prevent overloading caused by micro movements of the matrix and the patrix. The attachment is only designed for secure hold of the prosthesis, it is not, however, for permanent weight-bearing. In the case of extracoronal use, a shear distributor with integrated Interlock must be available. The required stability and force distribution are thus achieved.
Due to its snap function, the stud attachment offers patients more security, as a clear snapping in of the prosthesis is noticeable.

Indications
- Extracoronal applications
- Retaining element for bars
- Model casting fixation

Product variations
- Vario-Kugel-Snap vks-sg sv 1.7
- Vario-Kugel-Snap vks-sg 1.7
- Vario-Kugel-Snap vks-sg 2.2
- Vario-Kugel-Snap vks-sg 1.7 exchangeable stud
- Vario-Kugel-Snap vks-sg 2.2 exchangeable stud
- Vario-Kugel-Snap vks-sg 1.7 bar patrix
- Vario-Kugel-Snap vks-sg 2.2 bar patrix

Properties
- Cost-effective purchase
- Time-saving and secure processing
- Reduction of the alloy variety for high biocompatibility
- Cost-effective solution provided by castable plastic patrices

Materials
- Patrices
  - Combustible plastic
  - Castable precious metal alloy
- Matrices
  - Biocompatible thermoplast

Dimensions
The Vario-Kugel-Snap vks-oc stud head attachments are available in sizes 1.7 and 2.2.

The matrices have a retention of

green 4N

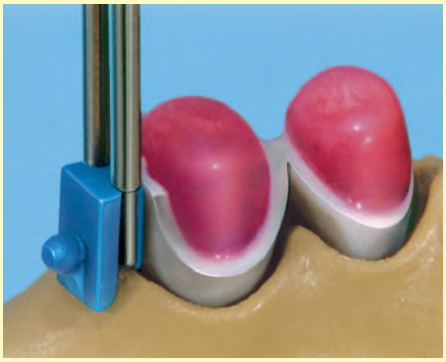


yellow 6N

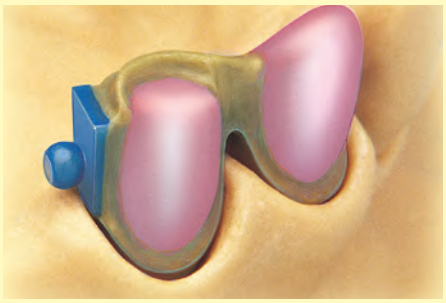


red 8N

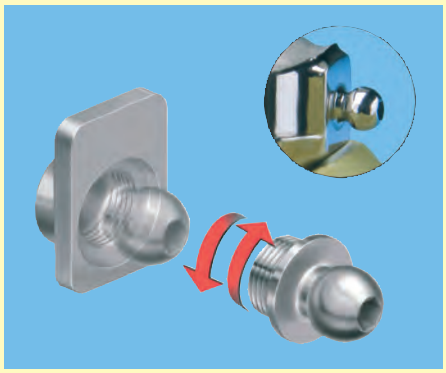




vks-sg sv 1.7



vks-sg 1.7/2.2

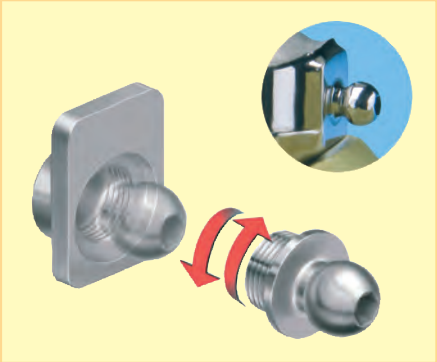


vks-sg 1.7/2.2 exchangeable stud

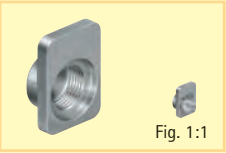


vks-sg 1.7/2.2 bar patrix

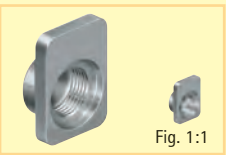
vks-sg exchangeable stud



Cast-on thread sleeve and exchangeable titanium stud for precision, biocompatibility and reliability.



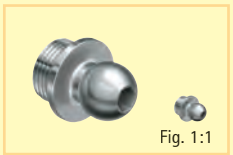
Thread sleeve vks-sg 1.7
1 piece
HL
REF 450 0005 9
platinum-iridium
REF 450 0006 0



Thread sleeve vks-sg 2.2
1 piece
HL
REF 450 0005 1
platinum-iridium
REF 450 0005 2



Stud-head screw vks-oc/sg 1.7
1 piece
titanium
REF 450 0005 6



Stud-head screw vks-oc/sg 2.2
1 piece
titanium
REF 450 0004 7

Assortment

vks-sg 1.7 exchangeable stud
5 pieces
1 Stud-head screw
1 Thread sleeve
1 Fixation screw
1 Screwdriver
1 Paralleling mandrel
REF 450 0006 1

Assortment

vks-sg 2.2 exchangeable stud
5 pieces
1 Stud-head screw
1 Thread sleeve
1 Fixation screw
1 Screwdriver
1 Paralleling mandrel
REF 450 0004 9

Accessories:



vks Paralleling mandrel oc/sg
1 piece
ph-vks 1.7
REF 430 0677 0
ph-vks 2.2
REF 360 0113 0



Screwdriver
short, hexagon
1 piece
REF 330 0069 0



Fixation screw M 2
1 piece
REF 450 0004 8
M 1.6
1 piece
REF 450 0005 7



Screwdriver
Stud-head screw vks oc/sg 1.7
1 piece
REF 330 0116 4



Tap vks exchangeable stud 1.7
1 piece
REF 460 0011 7



Tap vks exchangeable stud 2.2
1 piece
REF 460 0012 2

Important information about processing of attachments, see catalogue page 133

vks-sg exchangeable stud



The stud-head screw is only slightly screwed into the thread sleeve and held to the wax model using the paralleling mandrel.



The attachment patrix is waxed to the wax model in the path of insertion of the shear distributor with parallel interlock.



The stud head screw is turned out (anticlockwise) of the thread sleeve using the screwdriver.



The stud head screw is turned out (anticlockwise) of the thread sleeve using the screwdriver.



Colloid graphite is applied onto the thread of the fixation screw; then the screw is turned into the thread sleeve exerting minimum force.



The casting is sand-blasted and the fixation screw is turned out. The crowns are finished and the stud-head screw is turned in.



The stud-head screw is polished to high lustre using titanium polishing paste.



The yellow matrix is placed on the stud and the model is prepared for duplicating. Further processing with the Vario-Stud-Snap vks-sg.

Dimensions



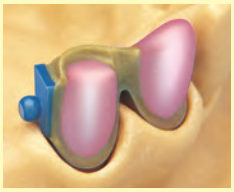


Product	REF	Ø	Depth	Thread	Width	Height
Stud-head screw vks-oc/sg 1.7	450 0005 6	Stud 1.7 mm		M 1.6 x 0.2		2.9 mm
Stud-head screw vks-oc/sg 2.2	450 0004 7	Stud 2.2 mm		M 2 x 0.25		3.5 mm
Thread sleeve HL vks-sg 1.7	450 0005 9	–	1.7 mm	1.7 mm	3.0 mm	4.0 mm
Thread sleeve platinum-iridium vks-sg 1.7	450 0006 0	–	1.7 mm	1.7 mm	3.0 mm	4.0 mm
Thread sleeve HL vks-sg 2.2	450 0005 1	–	1.7 mm	–	3.9 mm	5.1 mm
Thread sleeve platinum-iridium HL vks-sg 2.2	450 0005 2	–	1.7 mm	–	3.9 mm	5.1 mm

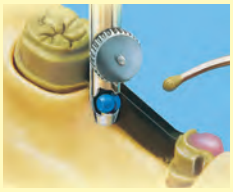
The complete product range



With integral shear distributor.



For custom applications.



For use on bars in tooth-bounded gaps when fabricating complex restorations.



Matrices
green – reduced snap-in friction
Refill package:
Ø 1.7 mm
8 pieces
REF 430 0668 0
Ø 2.2 mm
8 pieces
REF 430 0541 0



Matrices
yellow – regular snap-in friction
Refill package:
Ø 1.7 mm
8 pieces
REF 430 0666 0
Ø 2.2 mm
8 pieces
REF 430 0542 0



Matrices
red – high snap-in friction
Refill package:
Ø 1.7 mm
8 pieces
REF 430 0664 0
Ø 2.2 mm
8 pieces
REF 430 0543 0



Vario-Stud-Snap vks-sg/sv 1.7
Refill package:
Patrices
8 pieces
REF 430 0735 3



Patrix sg
Refill package:
Ø 1.7 mm
8 pieces
REF 430 0670 0
Ø 2.2 mm
8 pieces
REF 430 0537 0



Patrix sg universal
Refill package:
Ø 1.7 mm
8 pieces
REF 430 0676 0
Ø 2.2 mm
8 pieces
REF 430 0538 0



vks-Patrix universal HL
Refill package:
Ø 1.7 mm
2 pieces
REF 430 0701 0
Ø 2.2 mm
2 pieces
REF 430 0700 0



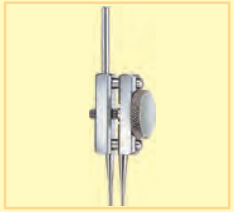
vks Paralleling mandrel oc/sg
1 piece
ph-vks 1.7
REF 430 0677 0
ph-vks 2.2
REF 360 0113 0



Matrix inserting instrument
vks-oc Ø 1.7 mm
1 piece
REF 430 0621 0
vks-oc Ø 2.2 mm
1 piece
REF 430 0548 0



Metal transfer patrices
vks-oc Ø 1.7 mm
8 pieces
REF 430 0662 0
vks-oc Ø 2.2 mm
8 pieces
REF 430 0548 2



Paralleling mandrel universal
for vks-sg/sv
REF 360 0115 1

Assortments

vks assortment	35 pieces	**REF 430 0530 0**
vks assortment sg/uni 1.7	25 pieces	**REF 430 0651 0**
vks assortment sg/2.2	10 pieces	**REF 430 0533 0**
vks assortment sg 1.7	10 pieces	**REF 430 0673 0**
vks assortment sg/sv 1.7	9 pieces	**REF 430 0735 2**

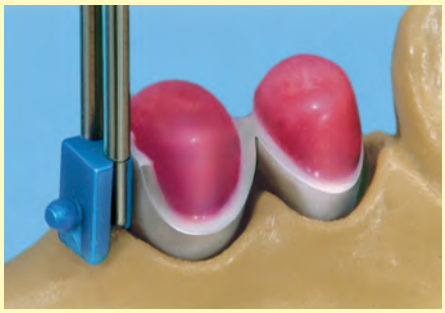


Dimensions

Product	REF	Depth	Width	Height
Patrix vks-sg 1.7	430 0670 0	2.7 mm	3.0 mm	4.1 mm
Patrix vks-sg 1.7 sv	430 0735 3	4.3 mm	3.5 mm	4.5 x 5.5 mm
Patrix vks-sg 2.2	430 0537 0	3.5 mm	3.8 mm	5.4 mm
Matrix vks-sg 1.7	430 0668 0	2.3 mm	3.2 mm	3.1 mm
	430 0666 0	2.3 mm	3.2 mm	3.1 mm
	430 0664 0	2.3 mm	3.2 mm	3.1 mm
Matrix vks-sg 2.2	430 0541 0	2.85 mm	4.2 mm	4.1 mm
	430 0542 0	2.85 mm	4.2 mm	4.1 mm
	430 0543 0	2.85 mm	4.2 mm	4.1 mm

Important information about processing of attachments, see catalogue page 133

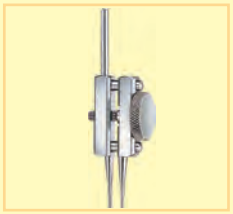
The complete product range



Shear distributor vks-sg/sv 1.7
sg/sv 1.7 patrix with a completely new snap-in attachment including a shear distributor with 1.7 mm stud. No additional shear distributor required.



Vario-Stud-Snap vks-sg/sv 1.7
Assortment
REF 430 0735 2



Paralleling mandrel
for the sg/sv 1.7 patrix. Its slender design simplifies waxing the attachment onto the crown.
REF 360 0115 1



After casting, the stud and friction surfaces must not be trimmed.



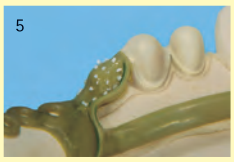
The high lustre surfaces are perfect for the friction snap-in matrix to fit precisely.



The model must always be duplicated with the yellow matrix in position. This ensures that the housing will be perfect for setting the snap-in friction as required.



The investment model can be cast using standard methods.

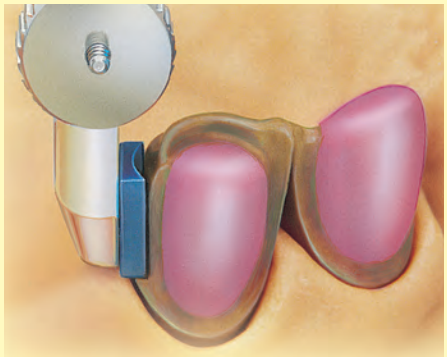


The precisely reproduced matrix is integrated into the pattern.



The outer coping, with the matrix pressed into place, guarantees long-term, gentle snap-in-friction.

If the vks attachment is to function perfectly it is essential that the patient finds the "snap-in spot" with the fingers and presses on the restoration to lock it into place.

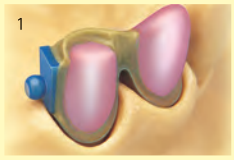


vks-sg for free-end dentures



sg patrix
The concave waxing surface and mirror-finish on the resin provide the best possible conditions for producing precise castings.

A shear distributor with Interlock milled at 0° is required if the Vario-Stud-Snap attachment matrix guarantee is to be honoured.



The concave waxing surface on the sg patrix permits it to be fitted in close proximity to the crown.



The diameter of the stud must not be modified.



No spacer wax should be applied beneath the matrix during blocking out so that the matrix can be fully enveloped in metal.



The framework pattern must cover the matrix completely.

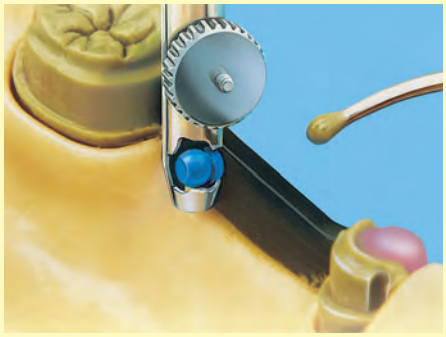


Trim the chrome cobalt framework as usual and fit it down. Coat the matrix housing with wax when polishing the framework.



Use the inserting instrument to insert the matrix with the desired friction.

The complete product range



For custom applications



Patrix sg universal
Refill package:
Ø 1.7 mm
8 pieces
REF 430 0676 0
Ø 2.2 mm
8 pieces
REF 430 0538 0



vks-Patrix universal HL
Refill package:
Ø 1.7 mm
2 pieces
REF 430 0701 0
Ø 2.2 mm
2 pieces
REF 430 0700 0



Matrices
green – reduced snap-in friction
Refill package:
Ø 1.7 mm
8 pieces
REF 430 0668 0
Ø 2.2 mm
8 pieces
REF 430 0541 0



Matrices
yellow – regular snap-in friction
Refill package:
Ø 1.7 mm
8 pieces
REF 430 0666 0
Ø 2.2 mm
8 pieces
REF 430 0542 0



Matrices
red – high snap-in friction
Refill package:
Ø 1.7 mm
8 pieces
REF 430 0664 0
Ø 2.2 mm
8 pieces
REF 430 0543 0



Wax bars - save time when waxing up bars/attachments

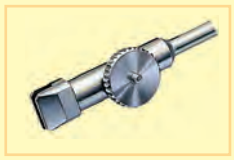
1.6 x 8 x 50 mm
REF 430 0265 0
1.9 x 4 x 50 mm
REF 430 0266 0
2.2 x 6 x 50 mm
REF 430 0267 0



vks Paralleling mandrel oc/sg
1 piece
ph-vks 1.7
REF 430 0677 0
ph-vks 2.2
REF 360 0113 0



Matrix inserting instrument
vks-oc Ø 1.7 mm
1 piece
REF 430 0621 0
vks-oc Ø 2.2 mm
1 piece
REF 430 0548 0



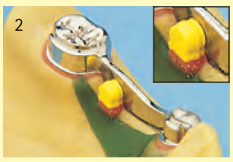
Paralleling mandrels for wax bars

Paralleling mandrel 1.6 for wstg 1.6
1 piece
REF 430 0268 0

Paralleling mandrel 1.9 – 2.2 for wstg 1.9 – 2.2
1 piece
REF 430 0270 0



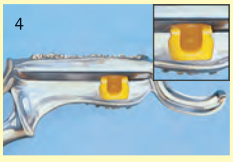
Once the cost-effective, one-piece casting has been completed, it can be blocked out for duplicating.



The investment model must be fabricated using a yellow matrix.



The bar and matrix are simply coated with wax. The remaining sections of the pattern should be waxed up as required.



The Vario-Stud-Snap sg retains every type of denture securely. The dentist can select the friction according to the patient's needs.

Important information about processing of attachments, see catalogue page 133

vks-sg matrix housing

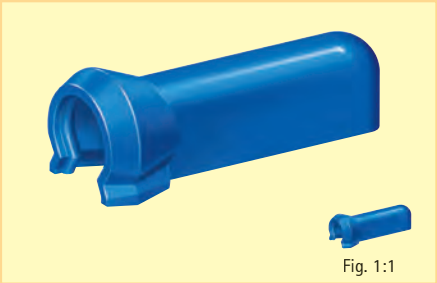


Fig. 1:1

Matrix housing
vks-sg 1.7
8 pieces
REF 430 0670 8

The matrix housing ensures reliable hold of the matrix and simultaneously allows to obtain a stress-free CoCr structure thanks to glueing.

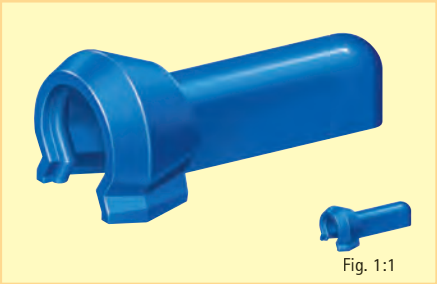


Fig. 1:1

Matrix housing
vks-sg 2.2
8 pieces
REF 430 0680 8



Prepare the crown in the usual way.



Insert the green matrix into the plastic matrix housing and place it on the stud patrix.



Use Pi-Ku-Plast for modelling the shear distributor and connect it with the matrix housing. Remove the matrix prior to casting.



Sandblast the appendix before glueing and attach retentions.



Use DTK adhesive to glue matrix housing and CoCr structure together.

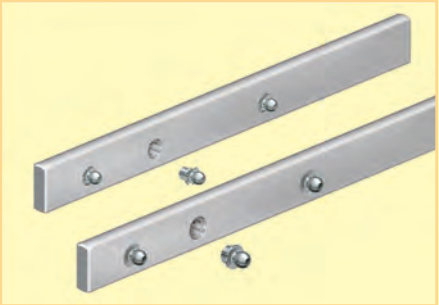


The appendix can also be polymerized directly into the plastic saddle.
A shear distributor is always required.

Vario-Kugel-Snap vks-sg

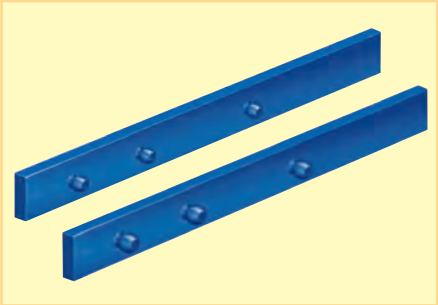
Important information about processing of attachments, see catalogue page 133

vks-sg bar patrix



vks-sg bar patrix titanium 1.7
1 piece
without stud-head screw
REF 450 0SA1 7

vks-sg bar patrix titanium 2.2
1 piece
without stud-head screw
REF 450 0SA2 2



vks-sg bar patrix 1.7
8 pieces
REF 430 0800 8

vks-sg bar patrix 2.2
8 pieces
REF 430 0810 8

Vario-Stud-Snap bar patrix.
Bar element with three integrated vks-studs in the sizes 1.7 or 2.2 mm. A titanium bar is also available for the exchangeable stud.

Assortment

vks-sg bar patrix 1.7
13 pieces
3 Matrices each
green, yellow, red

2 Bar patrixes
1 Matrix inserting instrument
1 Paralleling mandrel

REF 430 0806 0

Assortment

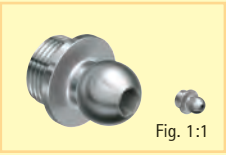
vks-sg bar patrix 2.2
13 pieces
3 Matrices each
green, yellow, red

2 Bar patrixes
1 Matrix inserting instrument
1 Paralleling mandrel

REF 430 0816 0



Stud-head screw vks-oc/sg 1.7 titanium
1 piece
REF 450 0005 6



Stud-head screw vks-oc/sg 2.2 titanium
1 piece
REF 450 0004 7



Matrices green – reduced snap-in friction
Refill package:
Ø 1.7 mm
8 pieces
REF 430 0668 0
Ø 2.2 mm
8 pieces
REF 430 0541 0



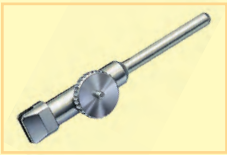
Screwdriver
Stud-head screw vks-oc/sg 1.7
1 piece
REF 330 0116 4



Screwdriver
short, hexagon
1 piece
REF 330 0069 0



Matrices yellow – regular snap-in friction
Refill package:
Ø 1.7 mm
8 pieces
REF 430 0666 0
Ø 2.2 mm
8 pieces
REF 430 0542 0



Paralleling mandrel 1.6
1 piece
REF 430 0623 0



Matrix inserting instrument
vks 1.7, 1 piece
REF 430 0621 0
vks 2.2, 1 piece
REF 430 0548 0



Matrices red – high snap-in friction
Refill package:
Ø 1.7 mm
8 pieces
REF 430 0664 0
Ø 2.2 mm
8 pieces
REF 430 0543 0



Time is saved during waxing up thanks to the integrated vks studs. The bar is cut to the proper length using a separating disc and fitted into the gap.



Use paralleling mandrel for waxing up the bar patrix to the crowns according to the direction of insertion.



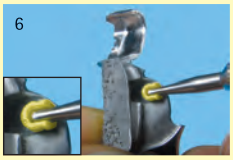
The cast bar and any undercuts below the matrix are blocked out (filled) with wax.



The bar and the matrix are simply coated with wax. The remaining sections of the pattern should be waxed up as required.



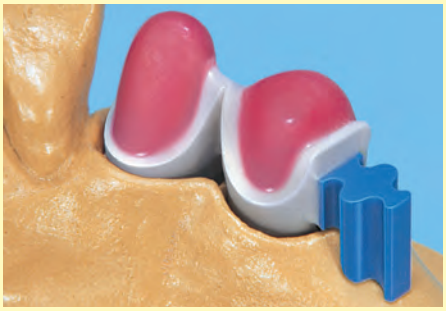
The chrome cobalt framework is fitted down and polished to high lustre using Brepol.



Use the inserting instrument to press the corresponding matrix in the housing.

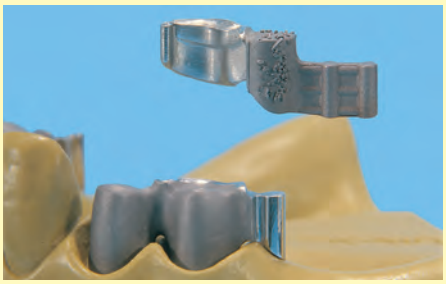
Rod attachments Vario-Soft 3

The rod attachments from the Vario-Soft group facilitate processing due to their rounded shape. A higher level of precision is thus achieved during manufacture, which offers easier handling for patients. The rod attachments are fricative and can be adjusted individually using the various colour-coded matrices. Soft incorporation and removal is achieved by means of the special plastic of the matrices. Application of a shear distributor with milled Interlock is also necessary for correct distribution of forces. The attachments with the integrated shear distributor are the exceptions.



Vario-Soft 3 mini sv

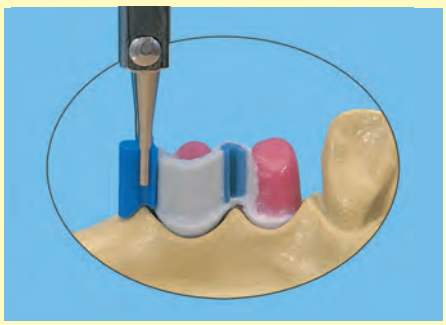
Indications
- Extracoronal applications
- Plastic fitting
- Model casting fixation



Vario-Soft 3 **matrix housing**

Product variations
- Vario-Soft 3 – the classic!
- Vario-Soft 3 sv – with integrated shear distributor
- Vario-Soft 3 mini – in the case of a small amount of space
- Vario-Soft 3 mini sv
- Vario-Soft 3 matrices housing
- Vario-Soft 3 bridge-sectioning attachment
- Vario-Soft 3 mini sv zircon – specially for the application of zirconium frameworks
- Vario-Soft 3 Conicalbridge – the small bridge-sectioning attachment

Properties
- Cost-effective purchase
- Time-saving and secure processing
- Reduction of the alloy variety for a high level of biocompatibility
- Cost-effective solution provided by castable plastic patrices



Vario-Soft 3 – the classic!



Vario-Soft 3 bridge-sectioning attachment

Materials
- Patrices
  - Combustible plastic
  - Castable precious metal alloy
- Matrices
  - Biocompatible thermoplast

The matrices have a retention of

green 4N

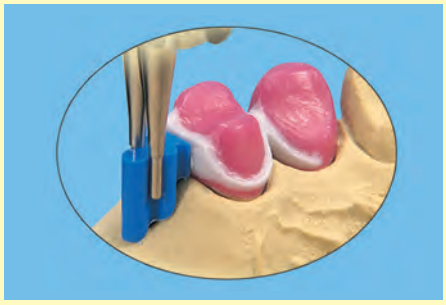


yellow 6N



red 8N

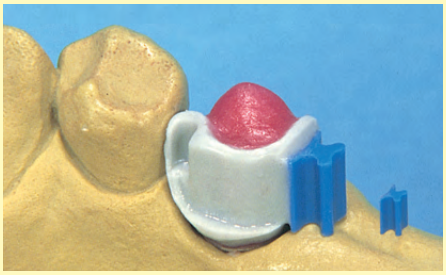




Vario-Soft 3 sv – with integrated shear distributor



Vario-Soft 3 mini sv zircon – specially for the application of zirconium frameworks

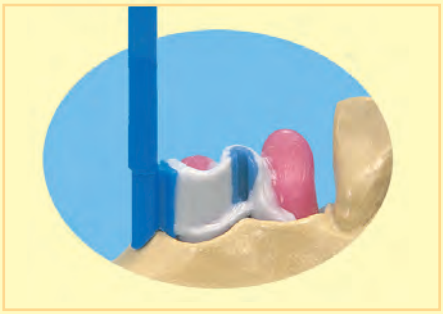


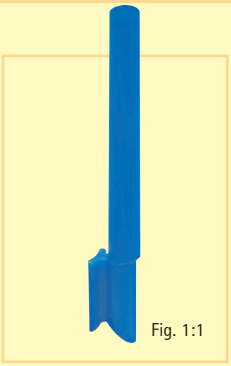
Vario-Soft 3 mini – in the case of a small amount of space



Vario-Soft 3 Conicalbridge – the small bridge-sectioning attachment

Vario-Soft 3




Fig. 1:1

offers numerous application possibilities using the same matrices

vs 3 Patrix
8 pieces
REF 430 0520 0

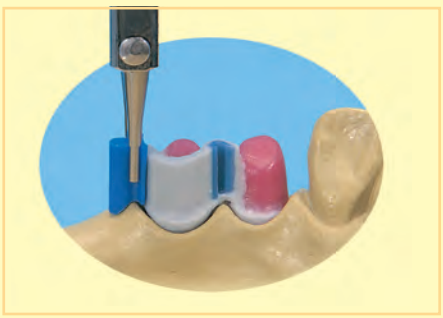



Fig. 1:1

vs 3 Patrix patrix with-outparalleling mandrel
8 pieces
REF 430 0737 0

Soft matrices
Matrixes that have proved their reliability for 15 years provide safety and ensure high comfort of wear for the patient.

Soft soft matrices
Special soft plastic compensates small divergences and minor processing imperfections.


Fig. 1:1

Duplicating matrix
8 pieces
REF 430 0737 2


Fig. 1:1

green - reduced friction
8 pieces
REF 430 0519 0


Fig. 1:1

green - reduced friction
8 pieces
REF 430 0565 0


Fig. 1:1

Wax matrix housing
8 pieces
REF 430 0521 0


Fig. 1:1

yellow - regular friction
8 pieces
REF 430 0518 0


Fig. 1:1

yellow - regular friction
8 pieces
REF 430 0564 0




Fig. 1:1

red - high friction
8 pieces
REF 430 0517 0


Fig. 1:1

red - high friction
8 pieces
REF 430 0563 0

Assortment

13 pieces
Vario-Soft 3
2 vs 3 Patrices
1 Matrix inserting instrument
2 Duplicating matrix
2 Wax matrix housing
2 Soft Matrices, green - reduced friction
2 Soft Matrices, yellow - regular friction
2 Soft Matrices, red - high friction
REF 430 0516 0

Assortment

13 pieces
Vario-Soft 3 Soft
2 vs 3 Patrices
1 Matrix inserting instrument
2 Duplicating matrix
2 Wax matrix housing
2 Soft Soft Matrices, green - reduced friction
2 Soft Soft Matrices, yellow - regular friction
2 Soft Soft Matrices, red - high friction
REF 430 0561 0

Assortment

13 pieces
Vario-Soft 3 without integrated paralleling mandrel
2 vs 3 Patrices without paralleling mandrel
1 Matrix inserting instrument
2 Duplicating matrix
2 Wax matrix housing
2 Soft Matrices, green - reduced friction
2 Soft Matrices, yellow - regular friction
2 Soft Matrices, red - high friction
REF 430 0738 2

Vario-Soft 3



After casting, patrices must only be processed using rubber polishers and high-lustre buffs.



The white duplicating matrix that has been adapted from the basal direction provides the perfect precondition for all other types of friction.



Master model prepared for duplicating.



Wax matrix housing on the investment material model guarantees a uniform chrome cobalt housing.

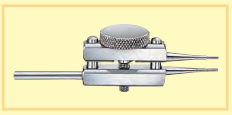


Completed wax pattern of the later chrome cobalt framework.



The use of the inserting instrument ensures precise positioning of the matrices.

Accessories:



Paralleling mandrel universal
for vks-sg/sv
REF 360 0115 1



Dimensions

Product	REF	Ø	Depth	Width	Height	Max. reduction
vs 3 Patrix	430 0737 0	1.8 mm	3.1 mm	3.0 mm	6.0/7.0 mm	3.0 mm
vs 3 Matrix	430 0519 0	–	3.6 mm	3.2 mm	7.0 mm	3.0 mm
	430 0518 0	–	3.6 mm	3.2 mm	7.0 mm	3.0 mm
	430 0517 0	–	3.6 mm	3.2 mm	7.0 mm	3.0 mm

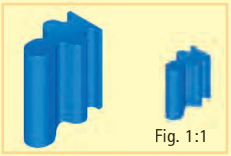
Vario-Soft 3 sv



with integrated shear distributor

saves time and provides perfect options for esthetic design while ensuring maximum transfer of forces.





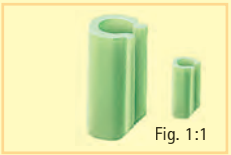
Patrix with shear distributor
8 pieces
REF 430 0737 4



Duplicating matrix
8 pieces
REF 430 0737 2



Wax matrix housing
8 pieces
REF 430 0521 0



Soft Matrix
green - reduced friction
8 pieces
REF 430 0519 0



Soft Matrix
yellow - regular friction
8 pieces
REF 430 0518 0

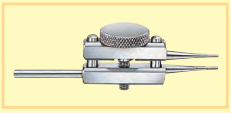


Soft Matrix
red - high friction
8 pieces
REF 430 0517 0



Matrix inserting instrument
2 pieces
REF 430 0736 6

Accessories:



Paralleling mandrel universal
for vks-sg/sv
REF 360 0115 1

Assortment

13 pieces
Vario-Soft 3 sv
2 vs 3 Patrices with integrated shear distributor
1 Matrix inserting instrument
2 Duplicating matrix
2 Wax matrix housing
2 Soft Matrices, green - reduced friction
2 Soft Matrices, yellow - regular friction
2 Soft Matrices, red - high friction
REF 430 0738 3

Dimensions



Product	REF	Ø	Depth	Width	Height	Max. reduction
vs 3 sv Patrix	430 0737 4	8 mm	5,3 mm	3.5 mm	6.0/7.0 mm	3.0 mm
vs 3 Matrix	430 0519 0	–	3.6 mm	3.2 mm	7.0 mm	3.0 mm
	430 0518 0	–	3.6 mm	3.2 mm	7.0 mm	3.0 mm
	430 0517 0	–	3.6 mm	3.2 mm	7.0 mm	3.0 mm



The patrix based on computer-aided-design includes all requirements of a modern filigree retaining element.



The white duplicating matrix guarantees precision-fit integration of the various friction matrices.



Master model prepared for the production of the investment compound model.



Precise investment material model ensures precision-fit integration of shear distributors.



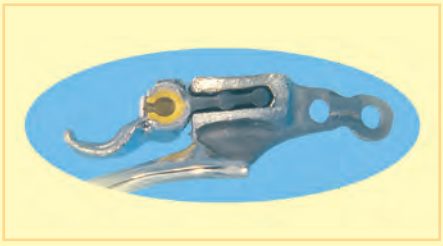
Due to the integrated shear distributor patient-friendly constructions that protect the periodontium can be achieved.

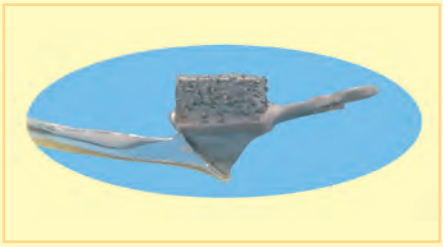


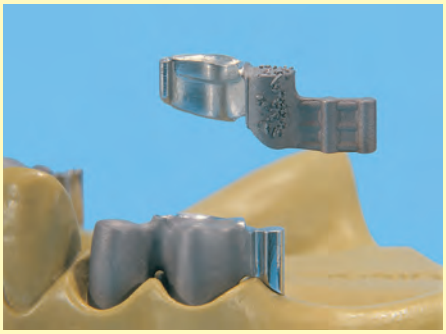
If other friction values are desired, simply exchange the matrices.



Vario-Soft 3 matrix housing



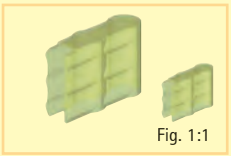




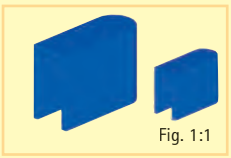
Made of plastic to produce a precision-fit metal matrix housing with any alloy.



Matrix housing
8 pieces
REF 430 0737 6



Duplicating matrix housing
8 pieces
REF 430 0737 8



Wax housing
8 pieces
REF 430 0738 0



Matrix yellow soft
regular friction
8 pieces
REF 430 0564 0

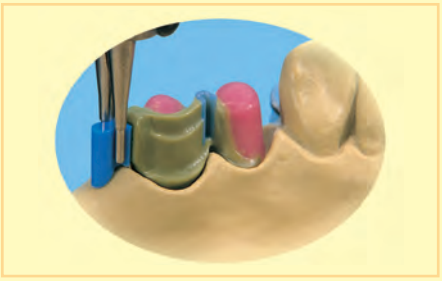
Assortment

6 pieces
Vario-Soft vs 3 Matrix housing
2 Matrix housing
2 Duplicating matrix housing
2 Wax housing
REF 430 0738 4

Accessories:



DTK-adhesive
REF 540 0010 6





The matrix housing is perfectly suitable for all vs 3 patrices. The shear distributor must be integrated.



Slide vs 3 matrix into matrix housing and adapt to the prevailing conditions from the basal direction; then place it onto the patrix.



The shear distributor is coated with Pi-Ku-Plast modelling resin and connected to the matrix housing. Retention crystal must not be spread onto the retention area of the matrix housing.



Prior to investing, remove vs 3 matrix from the matrix housing and cast in the alloy of your choice.



After removing inaccuracies in the cast object, insert the matrix with the inserting instrument.



The duplicating matrix housing is placed onto the retention element. The defined wall thickness of 0.2 mm ensures an optimum gap for glueing.



The outer shape of the duplicating matrix has also been designed in a way to ensure clamping of the adhesive during glueing.



The wax housing is placed onto the retention appendix and connected to the chrom cobalt model.



Prior to glueing, vaseline is applied to the master model and the parts to be glued are sandblasted with 110 µ aluminium oxide.



A thin coat of DTK adhesive is applied onto the matrix housing and the chrome cobalt framework.



which are then glued exerting uniform pressure.





Dimensions

Product	REF	Width	Height	Max. reduction
vs 3 Matrix housing	430 0737 6	1.8 / 4.7 mm	5.0 / 7.6 mm	individual

Vario-Soft 3 sv bridge-sectioning attachment

One attachment ...



Bridge-sectioning attachment with integrated shear distributor suitable for casting-on.


Fig. 1:1

Titanium screw
1 piece
REF 330 0070 0
10 pieces
REF 330 0071 0

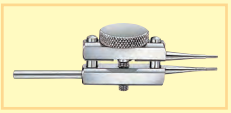

Fig. 1:1

Patrix HL suitable for casting-on
2 pieces
REF 430 0730 4


Fig. 1:1

Patrix HL cast-on
1 piece
REF 450 0000 1

Accessories:



Paralleling mandrel universal
1 piece
REF 360 0115 1



Screwdriver short
1 piece
REF 330 0069 0

Assortment

4 pieces, 1 piece each
Patrix HL cast-on
Titanium screw
Patrix HL suitable for casting-on
Screwdriver short
REF 450 0000 2



The bridge sectioning attachment that can be cast on is positioned at the wax pattern using the parelleling mandre.



After casting, the crown framework is checked and finished.



After ceramic veneering, the bridge-sectioning attachment is polished with high-lustre buffs.



Fix the cast-on closing ring with titanium screw and cover with Pi-Ku-Plast.



The bridge is waxed up in the usual way.



Completed and fitted bridge framework. Ready for ceramic veneering.

Dimensions



Product	REF	Ø	Depth	Width	Height	Max. reduction
Patrix	450 0000 1	1.8 mm	6.1 mm	3.0 mm	7.6/7.0 mm	2.8 mm
Titanium screw 1.4	330 0070 0	M1.4 x 0.3	–	2.1 mm	4.5 mm	1.2 mm
Patrix HL suitable for casting-on	430 0730 4	2.5 mm	–	–	2.1 mm	1.4 mm

Vario-Soft 3 sv bridge-sectioning attachment

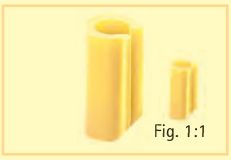
... two indications



In case of loss of the terminal abutment of the bridge the previous patrix becomes the fixation base for the new removable attachment denture.



Matrix
green - reduced friction
8 pieces
REF 430 0519 0



Matrix
yellow - regular friction
8 pieces
REF 430 0518 0



Matrix
red - high friction
8 pieces
REF 430 0517 0



Duplicating matrix
8 pieces
REF 430 0737 2



Wax matrix housing
8 pieces
REF 430 0521 0

Accessories:



Matrix adhesive assortment
REF 540 0103 1

If the plastic attachment matrix is not sufficiently retained in the chrome cobalt framework, this tested and approved adhesive system should be used.



After taking the impression and producing the model, the patrix is slid onto the previous bridge-sectioning attachment and duplicated.



Wax pattern of the later chrome cobalt framework on the investment material model.

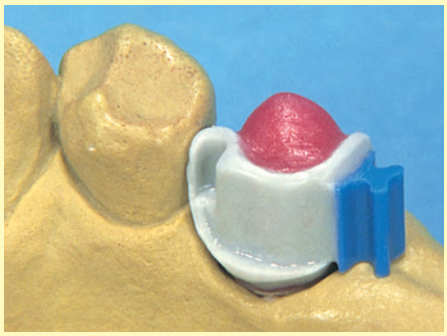


After casting, press in the desired friction matrix.

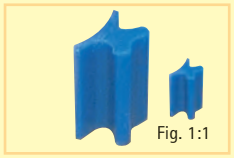


Completed chrome cobalt framework with attachment to prepare the set-up of teeth.

Vario-Soft 3 mini



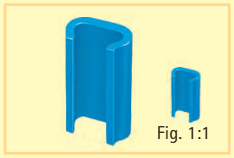
The computerized slender design and three patient-specific soft friction types provide reliable retention even in cases of limited space available.



Patrix
8 pieces
REF 430 0732 5



Duplicating matrix
white
8 pieces
REF 430 0732 3

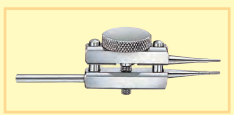


Wax matrix housing
8 pieces
REF 430 0732 0



Matrix inserting instrument
2 pieces
REF 430 0736 5

Accessories:



Paralleling mandrel universal
1 piece
REF 360 0115 1



Matrix
green - reduced friction
8 pieces
REF 430 0731 7



Matrix
yellow - regular friction
8 pieces
REF 430 0731 5



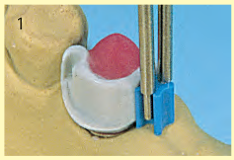
Matrix
red - high friction
8 pieces
REF 430 0731 3



Assortment

13 pieces
Vario-Soft 3 mini
2 Patrices
2 Duplicating matrices
2 Wax matrix housings
2 Matrices, green - reduced friction
2 Matrices, yellow - regular friction
2 Matrices, red - high friction
1 Matrix inserting instrument

REF 430 0731 2



The slender design of the paralleling mandrel ensures safe retention and leaves sufficient space for waxing up.



The duplicating matrix ensures precise fabrication of the metal matrix housing in the chrome cobalt framework.



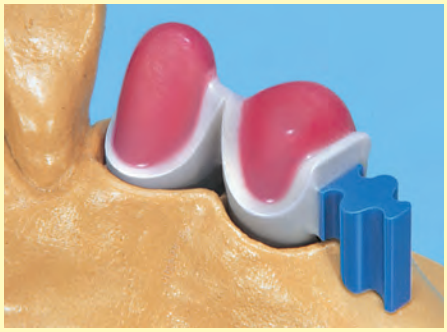
The working steps are carried out in the usual way. This way quality is assured.

Dimensions



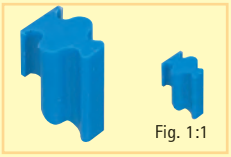
Product	REF	Depth	Width	Height	Max. reduction
vs 3 mini Patrix	430 0732 5	2.3 mm	3.1 mm	6.0 mm	3.0 mm
vs 3 mini Matrix	430 0731 7	2.0 mm	3.0 mm	6.0 mm	3.0 mm
	430 0731 5	2.0 mm	3.0 mm	6.0 mm	3.0 mm
	430 0731 3	2.0 mm	3.0 mm	6.0 mm	3.0 mm

Vario-Soft 3 mini sv



Assortment

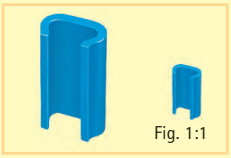
13 pieces
Vario-Soft 3 mini sv
2 Patrices
2 Duplicating matrices
2 Wax matrix housings
2 Matrices, green - reduced friction
2 Matrices, yellow - regular friction
2 Matrices, red - high friction
1 Matrix inserting instrument
REF 430 0733 0



Patrix
8 pieces
REF 430 0734 3



Duplicating matrix
white
8 pieces
REF 430 0734 1

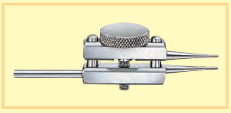


Wax matrix housing
8 pieces
REF 430 0733 8

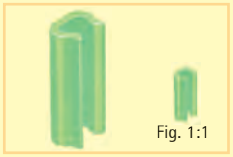


Matrix inserting instrument
2 pieces
REF 430 0736 4

Accessories:



Paralleling mandrel universal
1 piece
REF 360 0115 1



Matrix
green - reduced friction
8 pieces
REF 430 0733 5

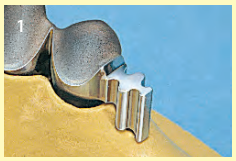


Matrix
yellow - regular friction
8 pieces
REF 430 0733 3



Matrix
red - high friction
8 pieces
REF 430 0733 1





The optimized combustion behaviour of the patrix guarantees the precision in the cast object.



The duplicating matrix can be individually adapted to any situation.



The pattern is waxed up according to standard criteria; no new techniques have to be learned.

Dimensions



Product	REF	Ø	Depth	Width	Height	Max. reduction
vs 3 mini sv Patrix	430 0734 3	–	4.1 mm	3.5 mm	5.8 mm	2.8 mm
vs 3 mini sv Matrix	430 0733 5	–	2.0 mm	2.6 mm	6.0 mm	2.8 mm
	430 0733 3	–	2.0 mm	2.6 mm	6.0 mm	2.8 mm
	430 0733 1	–	2.0 mm	2.6 mm	6.0 mm	2.8 mm

Vario-Soft 3 zircon sv and zircon sv mini



Regardless whether the model cast is made of Bio HPP or Brealloy, the new idea of creating removable prostheses in connection with zirconium is compelling.

Special attachments for zirconium constructions in connection with removable prostheses

- two versions: for lateral and anterior area
- reinforced shear distributor for highest stability
- surface-enlarged connection with retentions for a better hold
- can be individually cut to the desired size
- easily tactile due to perfect geometry
- integrable into any system



An establishedmatrix system- formore than 15 years. Convenient to use for reliable hold within prostheses.

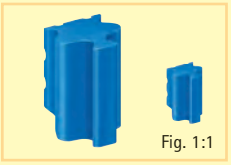


Fig. 1:1

Vario-Soft 3 zircon sv
13-parts assortment
REF 430 0732 8

Refill packages
8 male parts
REF 430 0732 2

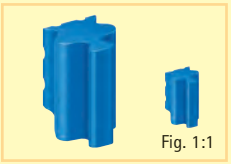


Fig. 1:1

Vario-Soft 3 zircon sv mini
13-parts assortment
REF 430 0732 7

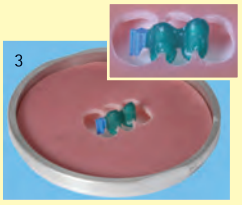
Refill packages
8 male parts
REF 430 0732 9



1 The primary construction is modeled with compoForm UV and prepared for copy milling. The attachment is arranged with the parallel holder.



2 The attachment is affixed with compoForm UV and immediately cured with bre.Lux N. In addition, the transition attachment/ modellation is wetted with SERACOLL UV and also cured in order to obtain a secure connection.



3 The modellation is affixed onto a five motions model frame. The per-fectly dimensioned shape of the attach-ment simplifies the milling process.

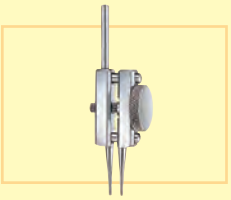


4 After the milling process, the attachment is cleanly milled in the proportionate magnification ration. The zirconium construction can be prepared for sin-tering.



5 After working out and fitting the attachment, the construction is polished to a high gloss with Zi-polish. The model is duplicated as usually.

Accessories:



Parallel holder universal
1 piece
REF 360 0115 1



compoForm UV
2 x 3 ml syringes
10 application canullae
REF 540 0115 0



SERACOLL UV
Light curing wax adhesive
2 x 3 ml
2 serving trays
REF 540 0115 1

Vario-Soft 3 conicalbridge



A precisely fitting sectioned bridge is made in a time-saving, economic, tension-free way without individual milling work and independent of alloy situation and.

Bridge sectioning attachment for fixed prosthesis in case of divergent abutment teeth

- Precisely fitting, full burn-out synthetic mold parts
- Conic shape for easy processing
- Integrated parallel holder on male parts and matrix save time and expand the application range
- Designed for intra- and extra-oral use
- No individual milling work necessary
- Primary and secondary parts are fabricated simultaneously to save time and money

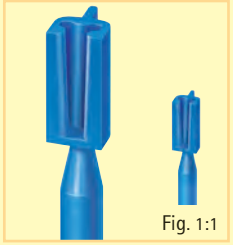


Fig. 1:1

Vario-Soft 3
conical bridge
4 females, 4 males
REF 430 0734 0

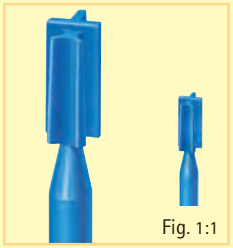


Fig. 1:1

Female and male parts are simply exchanged for intra- or extra-coronal use – any application is possible!



1 The modellation is made according to insertion direction and esthetic requirements.



2 Female and male parts are assembled and the parallel holder is taken off the not required part.



3 The existing retention and the height of the attachment are individually adjusted to the situation with a metal bur.



4 The secondary part is completed by of the modellation of the bridge link. By individualizing the attachment, it adapts to any situation perfectly.



5 Simply use a finger or an instrument to remove the parallel holder at the „predetermined breaking point".



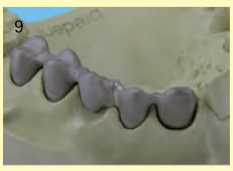
6 Primary and secondary part are mo-delled in one step - time saving, material saving, efficient.



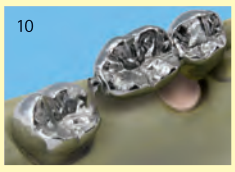
7 The modellation is moun-ted and invested according to the bredent Casting Technique in one step. With Transfuser and Brevest Rapid 1, the slender modellation is invested easily and bubble-free.



8 Following casting, the attachment is blast-polished with 50 µm pearls. The attachment is now assembled without having to work it over ela-borately.

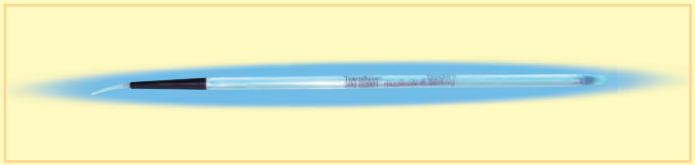


9 The attachment distinguishes itself through a special shape and precise fit. The long-lasting connection is proof for the success!

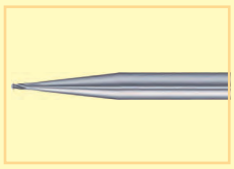


10 The integrated parallel holder allows intracoronal use of the female within the primary part.

Accessoires:



Transfuser –
for bubble-free investments
1 piece
REF 390 S000 1
4 pieces
REF 390 S000 4



Fissure Designer
REF B153 NF 04

IMMEDIATE RESTORATIONS WITH A REDUCED NUMBER OF IMPLANTS

CONCEPTUAL BACKGROUND AND CLINICAL RESULTS

Over 5,000 happy patients to date have proven that SKY fast & fixed is functioning in a reliable manner and the quality of life of the patients, who are on the verge of becoming edentulous, has been significantly improved by fixed bridges.

The initiators of the ideas, Dr. Georg Bayer, Dr. Frank Kistler, Dr. Steffen Kistler, DT Stephan Adler and PD Dr. Jörg Neugebauer are now able to present the results of their 5 years of experience with SKY fast & fixed. The authors explain how these innovative procedures can also be successfully introduced and used in your practice. In addition, they demonstrate the possibility of temporary and fixed restorations in which the SKY fast & fixed treatment concept can be successfully used in patients, as well as describing the commercial opportunities that this also offers for every practice.



REF 9929710D (German)
REF 992971GB (English)

Retaining elements

The special retaining elements provide individual use and enable a holding strength that is exactly adapted to the patient. The retaining elements can be used with all removable prostheses and thus offer a high degree of flexibility.

Indications
- Extracoronal applications
- Snap and friction

Product variations
- Inverto Plus – the classic metal attachment
- Activatable friction cylinder – individual and biocompatible
- Vario Compress 1 and 2 for individual friction adjustment
- Stud fixator – for quick repair after a loss of friction
- Cylinder attachment – friction and snap matrices for the individual solution

Properties
- Cost-effective purchase
- Time-saving and secure processing
- Reduction of the alloy variety for high biocompatibility

Materials
Biocompatible precious metal alloys, silicones and thermoplastic plastics are used depending on the type of retaining element.

The retaining elements have individually-adjustable friction.



Vario Compress 1 and 2 for individual friction adjustment



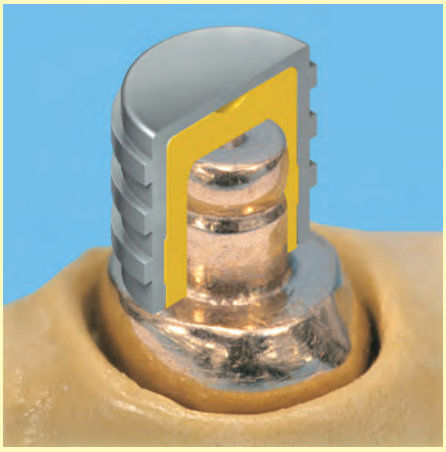
Stud fixator – for quick repair after a loss of friction



Inverto Plus – the classic metal attachment



Activatable friction cylinder – individual and biocompatible



Cylinder attachment – friction and snap matrices for the individual solution

Inverto Plus



Exchangeable, intracoronal attachment with activating screw.



Matrix
HL suitable for casting-on
1 piece
REF 450 0004 0



Patrix 45°
incl. activating screw, glue-in sleeve and basal screw
1 piece
REF 450 00P4 5



Basal screw
for 45° and 90°
1 piece
REF 450 0004 4



Auxiliary duplicating element, plastic
8 pieces
REF 450 0004 2



Glue-in sleeve
for 45° and 90°
1 piece
REF 450 0005 0



Matrix
resin
2 pieces
REF 450 0004 1



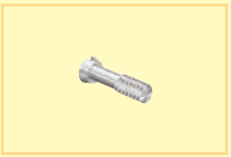
Patrix 90°
incl. activating screw, glue-in sleeve and basal screw
1 piece
REF 450 00P9 0



Activating screw
for 45° type
1 piece
REF 450 00A4 5

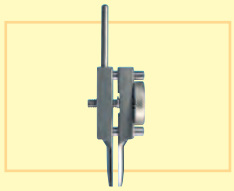


Ceramic spacer
1 piece
REF 450 0004 3



Activating screw
for 90° type
1 piece
REF 450 00A9 0

Accessories:



Paralleling mandrel universal 2
1 piece
REF 360 0116 0

Wax model



Attachment is attached to the wax model with HL or plastic matrix.

Completed casting



Finish the casting and adjust height of attachment.

Duplicating



Replace auxiliary duplicating element with glue-in sleeve and block out undercuts. Duplicate in the usual way.

Glueing in the attachment



Produce CoCr structure and glue the glue-in sleeve onto the model.

Cleaning glueing areas



Clean glueing areas and remove excess material after the adhesive has hardened.

Dimensions



Product	REF	Ø	Depth	Length	Width	Height
Matrix resin/HL	450 0004 0	–	1.55 mm	–	2,4 mm	5.4 mm
Patrix 45°	450 00P4 5	–	5.1 mm	–	2.5 mm	5.0 x 3.1 mm
Patrix 90°	450 00P90	–	5.1 mm	–	2.5 mm	5.0 x 3.1 mm
Glue-in sleeve	450 0005 0	2.5 mm	–	–	3.1 mm	–
Basal screw	450 0004 4	2.0 mm	–	0.8 mm	–	–
Activating screw 45°	450 00A4 5	1,0 mm	–	1.7 mm	–	–
Activating screw 90°	450 00A9 0	1,0 mm	–	4.0 mm	–	–
Auxiliary duplicating element	450 0004 2	2.9 mm	–	–	–	3.2 mm

Activatable frictions cylinder



Individually adjustable, biocompatible plastic cylinder with titanium screw.
Easy integration and safe hold of the denture due to the special shape of the friction cylinder.



Assortment
4 pieces
2 Friction cylinders
2 Titanium screws
REF 440 0068 0



Assortment
20 pieces
10 Friction cylinders
10 Titanium screws
REF 440 0068 1

- **individually adustable friction**
- **safe hold in the CoCr structure due to the retention stud**



Friction cylinders Ceramic spacer
REF 440 0068 3



1 Activatable use of the friction cylinder is possible with the attachment of the VS 3 group or with telescopic crowns.



2 Always use a shear distributor for attachments.



3 The plane surface of the friction cylinder is attached to the patrix.



4 Prior to duplicating, blocking out with wax to the basal direction is carried out and the model is prepared in the usual way.



5 The precise reproduction of the friction cylinder ensures accurate fit in the CoCr structure.



6 Prepare the model for investing in the usual way.



7 The friction cylinder is pressed into the CoCr structure using a blunt object. The screw seat is facing the basal area.



8 Due to the adjustment of the titanium screw, the hold of the denture can be individually adjusted to the respective patient.



Perfectly suitable for telescopic crowns

Dimensions



Product	REF	Thread	Depth	Length	Width	Height
Friction cylinders	440 0068 0	–	2.4 mm	–	2.4 mm	3.2 mm
Titanium screw		M 1.4 x 0.3	–	–	–	2.6 mm

Vario Compress 1

VC 1: Individually adjustable friction with an adjusting screw.

VC 1 adjusting screw
- precision thread
- titanium grade 5
- can be shortened individually

Approximal aperture of the VC 1 friction silicon bearing
- the retention force of the friction silicone is transferred to the primary element through this aperture

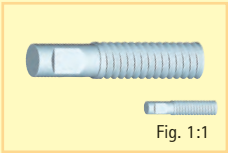
Thread turn and bearing for compressable VC1 friction silicon
- initial mould is produced with a ceramic mould in the casting procedure
- special tools for finishing the thread turn and bearing of the friction silicon ensure precise guidance of the components

VC 1 adjusting screw and VC 1 friction silicon
- adjusting screw compresses the silicone individually
- due to the individual compression of the friction silicon the friction of the telescopic anchor is adjusted
- friction silicon features a hollow space inside, under pressure the wall of the friction silicon springs quickly into this hollow space
- this way soft friction and smooth integration are guaranteed

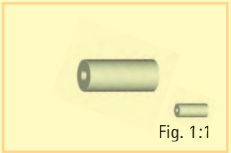


Rod attachment
- any type of rod attachment can be used
- VC 1 can also be used at telescopic crowns

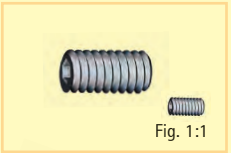
Vario Compress VC 1: A cylinder of abrasion-resistant special silicon is individually compressed with an adjusting screw. Due to the compression, this friction silicon exerts gentle pressure to the wall of the telescopic anchor that can be adjusted perfectly. Accordingly, individual adjustment of the static friction of the telescopic anchor is possible. The thread turn for the adjusting screw and the bearing of the friction silicon are shaped with a heat-resistant ceramic mould in the casting procedure. After casting, special tools ensure the precision of the thread turn and the bearing. Perfectly suitable for chrome cobalt supply - safe, economical and precise.


Fig. 1:1

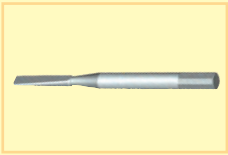
VC 1
Ceramic screw
Ø 2 mm length 9,5 mm
1 piece
REF 460 0010 3


Fig. 1:1

VC 1 Friction silicon
Ø 1.7 mm length 4 mm
1 piece
REF 460 0010 4


Fig. 1:1

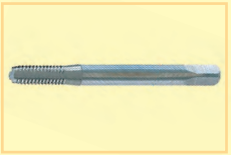
VC 1 Titanium adjusting screw
Ø 2 mm length 4 mm
1 piece
REF 460 0010 5



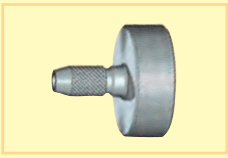
Ceramic removing tool
1 piece
REF 460 0010 6



Second tap, tungsten carbide
1 piece
REF 460 0010 M



Last tap, tungsten carbide
1 piece
REF 460 0010 F



Tap handwheel
1 piece
REF 330 0115 3



Screwdriver, short
1 piece
REF 330 0069 0

Assortment

8 pieces, 1 piece each
Vario Compress 1
VC 1 Ceramic screw
VC 1 Friction silicon
VC 1 Titanium adjusting screw
Ceramic removing tool
Second tap, tungsten carbide
Last tap, tungsten carbide
Tap handwheel
Screwdriver, short
REF 460 0010 1

Assortment

3 pieces, 1 piece each
Vario Compress 1
VC 1 Ceramic screw
VC 1 Friction silicon
VC 1 Titanium adjusting screw
REF 460 0010 7

Dimensions



Product	REF	Ø/Thread	Length	Max. reduction
Adjusting screw	460 0010 5	M 2 x 0.4	4 mm	2 mm
Friction silicon	460 0010 4	1.7 mm	4 mm	–

Vario Compress 1



Vario Compress 1 can also be used on telescopic crowns. Produce primary elements in the usual way. Secondary elements are waxed up directly or produced in the chrome cobalt technique (see figure 2).



Position ceramic screw so that contact with the primary element is ensured and fix with wax. Then complete the wax pattern of the secondary construction (see figure 3).



Invest and cast as usual; after casting, the secondary construction must be fitted onto the primary element and polished to a high luster.



After high luster polishing, remove the ceramic screw, recut the thread, position the VC 1 friction silicon and adjust the friction with the adjusting screw.

VC 1: Individually adjustable friction for all telescopic attachments.



Prepare wax pattern of the anchor crowns in the usual way. Attach the selected type of extracoronal rod attachment to the wax moulds. Vario Compress 1 can also be used with telescopic crowns.



Cast, polish and finish crowns in the usual way. Parallel surfaces of the primary elements must be milled according to standard techniques. Prepare primary elements to produce the secondary elements.



Block out the model to produce a chrome cobalt duplicate. Prepare duplicating mould and chrome cobalt model. Then model the chrome cobalt structure according to the dental technical rules.



The special VC 1 spacer is fixed with wax in the correct position on the chrome cobalt model. Contact with the friction surface of the primary element must be ensured. The VC 1 ceramic spacer provides precise reproduction of the shape of the screw and the cylindrical VC 1 friction silicon.



Then complete the wax model of the secondary structure. The VC 1 ceramic spacer projects from the wax model. This way safe retention in the investment material of the casting ring is ensured.



After casting, complete the chrome cobalt structure on the primary construction. After polishing the chrome cobalt structure, remove the ceramic spacer by turning the ceramic removing tool gently.



Prethread the thread with the tungsten carbide first tap. The second tap removes small ceramic residues in the thread turn. Then recut the thread with the tungsten carbide last tap. Use sufficient quantities of milling and drilling oil when tapping.



Insert the VC 1 friction silicon into the clean drill hole. The VC 1 features a hollow space inside. Under pressure, the wall of the friction silicon springs into this hollow space so that soft friction is ensured.



Lock the thread with the adjusting screw and fasten the screw slightly. Due to the pressure of the adjusting screw the VC 1 friction silicon is compressed. This way the friction of the attachment is adjusted.

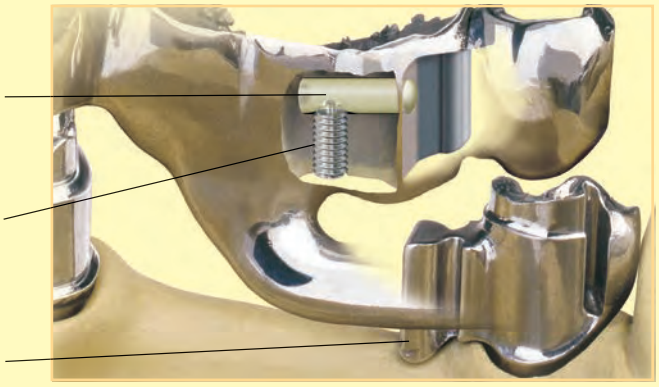
Vario Compress 2

Friction silicon allows to adjust individual friction for attachments and telescopic crowns.

Abrasion-resistant special silicon provides extended durability and safe hold of the denture.

The friction silicon is compressed by turning the VC 2 titanium adjusting screw. The friction is adjusted individually. Vario Compress 2 can be integrated from the basal or oral direction.

The primary element can be designed individually. Vario Compress 2 can be used for various indications.



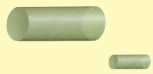


Fig. 1:1

VC 2 Friction silicon
Ø 1.9 mm
Length 6 mm
1 piece
REF 460 0011 5

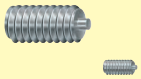


Fig. 1:1

VC 2 Titanium adjusting screw
Ø 2 mm
Length 5 mm
1 piece
REF 460 0011 4

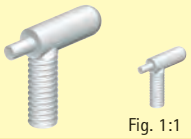


Fig. 1:1

VC 2 Ceramic spacer
Ø 2 mm
Length 5 mm
1 piece
REF 460 0011 3

Assortment

8 pieces, 1 piece each
Vario Compress 2
VC 2 Friction silicon
VC 2 Adjusting screw titanium
VC 2 Ceramic spacer
Ceramic removing tool
Second tap, tungsten carbide
Last tap, tungsten carbide
Tap wheel
Screwdriver, short
REF 460 0011 0

Assortment

3 pieces, 1 piece each
Vario Compress 2
VC 2 Friction silicon
VC 2 Titanium adjusting screw
VC 2 Ceramic spacer
REF 460 0011 2



The model is prepared for duplicating.



The position of the ceramic spacer is marked on the investment model using a pen.



A small cavity at the crown and a hole in the basal area are drilled with the Rapidy 2.1 mm until the correct position of the ceramic spacer on the model is ensured.



Complete the model so that only the ceramic spacer needs to be inserted.



Integrate the ceramic spacer completely into the wax model and invest.



The ceramic is removed from the thread with the ceramic removing tool. Residual ceramic particles are sandblasted with 50 my glass beads.



Prepare a chamfer at the thread opening using the Rapidy 2.1 mm and recut the thread using the taps.



The titanium adjusting screw is turned in after completion and shortened adequately.

The ceramic removing tool and the taps, see Vario Compress 1.

Dimensions



Product	REF	Ø/Thread	Length	Max. reduction
Titanium adjusting screw	460 0011 4	M 2 x 0.4	5 mm	2.5 mm
Friction silicon	460 0011 5	1.9 mm	6 mm	individual

Stud fixator



As a snap element or to increase the friction for new restorations and repairs.
Ceramic stud and cavity-filling silicone as buffers ensure durability and soft integration of the restoration.

- Time is saved thanks to quick and easy integration
- Friction is restored subsequently
- Ceramic stud for prolonged comfort of wearing
- Hygiene-friendly thanks to cavity-filling silicone



Fig. 1:1

Stud fixator
2 pieces
REF 440 0265 1

Accessories:



DTK adhesive
REF 540 0010 6

Procedure in the laboratory



To reproduce the oral situation accurately, use Pi-Ku-Plast to fabricate the primary construction



and to produce a working model.



Prepare a matrix before removing the resin saddle.



Drill a hole with a diameter of 2.1 mm into the secondary element and place it back on the model.



Use the drill (Ø 2.1 mm) to carefully prepare a groove with a max. depth of 0.4 mm in the resin saddle.



The stud fixator is fitted in the CoCr structure and fixed with DTK adhesive.



The housing of the stud fixator must be flush with the crown wall. Only the ceramic stud may stand out in the crown. Reattach the resin saddles.



Prepare a coping of the resin die using a thermoforming foil.



Mark the groove on the resin die with a pen. Drill a hole (Ø 2.1 mm) through the die coping at this point.

Procedure in the practice



Place the die coping onto the primary construction in the mouth and transfer the position of the groove accurately.



Integrate the restoration with friction being restored.

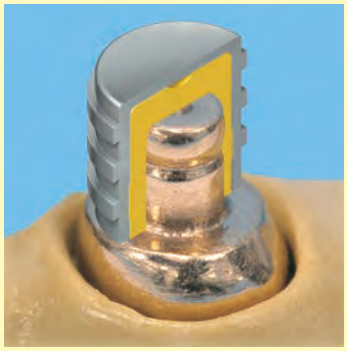
Dimensions



Product	REF	Ø	Length
Stud fixator	440 0265 1	2.2 mm	3.7 mm

Cylindrical attachment zg

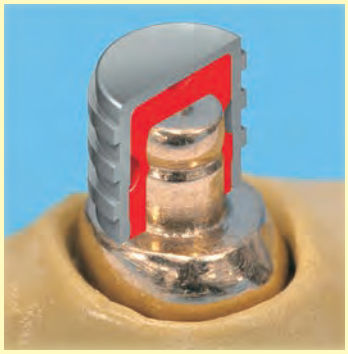
Universally suitable attachment featuring snap or friction



Friction

Resin matrices in three different
colors, with different pull-off force and easy exchangeability allow fast and specific adjustment of the total pull-off force of the removeable restoration.
Friction matrices or snap matrices are available in 3 different colors each and different retention levels.
The green matrix for reduced, the yellow matrix for normal and the red matrix for strong retention.

Whether the restoration is held by friction or snap can be decided individually and changed by simply exchanging the resin friction matrices or resin snap matrices.



Snap

For receiving the resin matrices and for stress-free, low-cost integration into the denture, the titanium matrix housing K for direct fixation in acrylics or the titanium matrix housing M for fixation (glueing) in the chrome cobalt framework are used.

Please select:

1. Resin patrix or metal patrix



Resin patrix
8 pieces
REF 440 0120 8
50 pieces
REF 440 0125 0





Patrix cast-on
2 pieces
REF 440 0120 2



2. Metal matrix housing for the integration in resin



Titanium matrix housing K
2 pieces
REF 440 0230 2
8 pieces
REF 440 0230 8
50 pieces
REF 440 0235 0





Duplicating matrix
2 pieces
REF 440 0250 2

for the integration in metal



Titanium matrix housing M
2 pieces
REF 440 0240 2
8 pieces
REF 440 0240 8
50 pieces
REF 440 0245 0





Wax matrix housing
8 pieces
REF 440 0260 8
50 pieces
REF 440 0265 0

Cylindrical attachment zg



Friction and snap matrices can be exchanged among each other.

3. Matrixes with resilience, friction or snap

Friction



Matrix green
reduced friction
8 pieces
REF 440 0150 8
50 pieces
REF 440 0155 0



Matrix yellow
normal friction
8 pieces
REF 440 0140 8
50 pieces
REF 440 0145 0



Matrix red
high friction
8 pieces
REF 440 0130 8
50 pieces
REF 440 0135 0

Snap



Matrix green
reduced friction
8 pieces
REF 440 0180 8
50 pieces
REF 440 0185 0

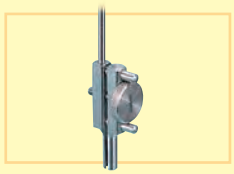


Matrix yellow
normal friction
8 pieces
REF 440 0170 8
50 pieces
REF 440 0175 0



Matrix red
high friction
8 pieces
REF 440 0160 8
50 pieces
REF 440 0165 0

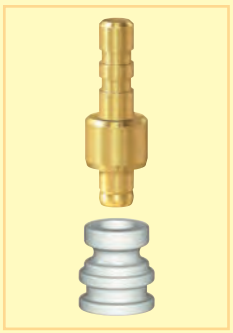
Accessories:



Paralleling mandrel universal 2
1 piece
REF 360 0116 0



Insertion pin
1 piece
REF 360 0116 4



Impression transfer set
Transfer patrix
2 pieces
Transfer matrix
2 pieces
REF 440 0116 3



Matrix pliers
1 piece
REF 310 0000 6



DTK adhesive
REF 540 0010 6

Dimensions



Product	REF	Ø	Height	Ø Wax-on area
Resin patrix	440 0120 8	2.5 mm	3.8 mm	4.6 mm
Patrix HL	440 0120 2	2.5 mm	3.7 mm	4.3 mm
Metal matrix housing K	440 0230 2	4.8 mm	4.2 mm	–
Titanium matrix housing M	440 0240 2	4.3 mm	4.2 mm	–
Matrices Friction / Snap	440 0150 8	3.75 mm	3.8 mm	–
	440 0140 8	3.75 mm	3.8 mm	–
	440 0130 8	3.75 mm	3.8 mm	–
	440 0180 8	3.75 mm	3.8 mm	–
	440 0170 8	3.75 mm	3.8 mm	–
	440 0160 8	3.75 mm	3.8 mm	–

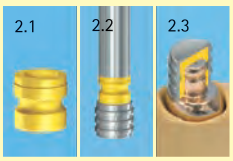
Cylindrical attachment zg

Cylindrical attachment and integration into full denture





The cast-on patrix or the resin patrix is waxed on using the parallel holder.



2.1 Matrix with resilience buffer.
2.2 The matrix is pressed in the metal matrix housing using the insertion pin.
2.3 The functional principle of the resilience matrix.



While processing the resilience matrix the spacer disc must be placed under the metal matrix housing.



A base for the wax pattern in which the metal matrix housings are fixed is produced using tray material.



During completion, blocking out with liquid silicone below the metal matrix housing is required to prevent resin from reaching into the matrix during pressing.



The cylindrical attachment provides a simple and economic way of processing that can be used in many application fields.



If required, the resin matrix can be removed with the matrix pliers and replaced by a new matrix with different friction.

Basic assortment

12 pieces
for the integration in resin *, Friction
2 Resin patrices
2 Matrices Friction, green, reduced friction
2 Matrices Friction, yellow, normal friction
2 Matrices Friction, red, high friction
2 Titanium matrix housing K
1 Paralleling mandrel universal 2
1 Insertion pin

REF 440 0115 5

Basic assortment

12 pieces
for the integration in resin *, Snap
2 Resin patrices
2 Matrices Snap, green, reduced friction
2 Matrices Snap, yellow, normal friction
2 Matrices Snap, red, high friction
2 Titanium matrix housing K
1 Paralleling mandrel universal 2
1 Insertion pin

REF 440 0115 4

Refill package

10 pieces
assorted *, Friction
2 Resin patrices
2 Matrices Friction, green, reduced friction
2 Matrices Friction, yellow, normal friction
2 Matrices Friction, red, high friction
2 Titanium matrix housing K

REF 440 0115 8

Refill package

10 pieces
assorted *, Snap
2 Resin patrices
2 Matrices Snap, green, reduced friction
2 Matrices Snap, yellow, normal friction
2 Matrices Snap, red, high friction
2 Titanium matrix housing K

REF 440 0115 7

*The cast-on patrices (2 pieces) are available separately REF 440 0120 2.

Cylindrical attachment zg

Cylindrical attachment with friction matrices zg-f

The ideal combination with other parallel retention elements.





Basic assortments for the integration in resin, see page 180.



After the try-in of the telescopic crowns the patrix is waxed onto the root cap parallel to the direction of insertion of the other supporting elements



In order not to change the shape of the cylindrical patrix, polishing to high luster should only be carried out using a cotton buff.



The external form of the metal matrix housing ensures safe retention in the resin.



Individual adjustment of friction even after several years provide maximum comfort of wear.

Basic assortment

16 pieces
for the integration in metal *, Friction
2 Resin patrices
2 Matrices Friction, green, reduced friction
2 Matrices Friction, yellow, normal friction
2 Matrices Friction, red, high friction
2 Duplicating matrices
2 Wax matrix housings
2 Titanium matrix housing M
1 Paralleling mandrel universal 2
1 Insertion pin

REF 440 0115 2

Refill package

14 pieces, **assorted*, Friction**
2 Resin patrices
2 Matrices Friction, green, reduced friction
2 Matrices Friction, yellow, normal friction
2 Matrices Friction, red, high friction
2 Duplicating matrices
2 Wax matrix housings
2 Titanium matrix housing M

REF 440 0116 1

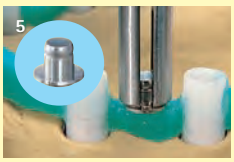
Cylindrical attachment with snap matrices zg-s

Stress-free glueing of the metal matrix housing in the CoCr denture is possible.

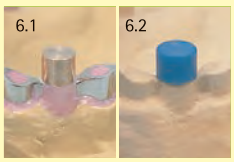




Friction and snap matrices can be exchanged among each other.



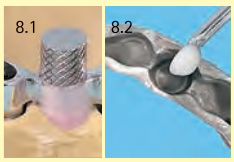
The cylindrical attachment provides a wide indication range. After casting, the duplicating matrix (6.1) is placed onto the patrix and



blocked out to the basal direction. Then the wax matrix housing (6.2) is placed on the investment material model and the CoCr structure is modelled.



Due to the small size of the cylindrical attachment an esthetic pattern can be prepared.



The metal matrix housing is glued into the CoCr structure using DTK-adhesive.

Basic assortment

16 pieces
for the integration in metal *, Snap
2 Resin patrices
2 Matrices Snap, green, reduced friction
2 Matrices Snap, yellow, normal friction
2 Matrices Snap, red, high friction
2 Duplicating matrices
2 Wax matrix housings
2 Titanium matrix housing M
1 Paralleling mandrel universal 2
1 Insertion pin

REF 440 0115 1

Refill package

14 pieces, **assorted*, Snap**
2 Resin patrices
2 Matrices Snap, green, reduced friction
2 Matrices Snap, yellow, normal friction
2 Matrices Snap, red, high friction
2 Duplicating matrices
2 Wax matrix housings
2 Titanium matrix housing M

REF 440 0116 0

* The cast-on patrices (2 pieces) are available separately REF 440 0120 2.

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The advantage for your knowledge!

Bar connections

The classic solution for implant works. The stable connection between both abutments provides secure grip for the prosthesis. The various bar profiles and the matrices which accompany them allow the prosthesis to be structured in a way that is suitable for the patient.

Indications
- Implant prosthetics
- Root cap solutions
- Definitive bar stub

Product variations
- Vario-Soft-profile bar for snap, friction and friction-snap
- Vario-Soft-Soft – the conical bar with friction matrices
- Wax bars – varied choice for every type of use

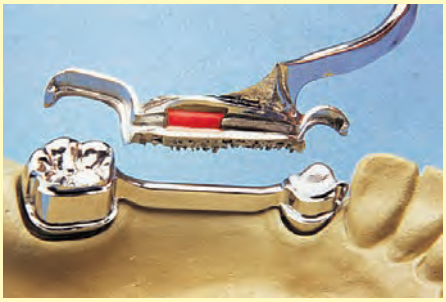
Properties
- Cost-effective purchase
- Time-saving and secure processing
- Reduction of the alloy variety for high biocompatibility
- Cost-effective solution provided by castable plastic patrices

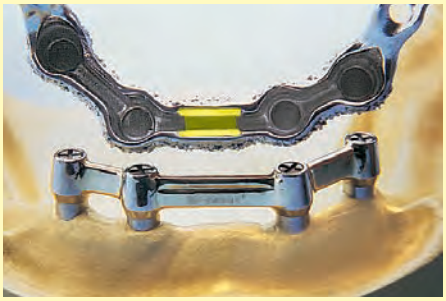
Materials
- Patrices
  - Combustible plastic or wax
  - Biocompatible titanium
- Matrices
  - Biocompatible thermoplast

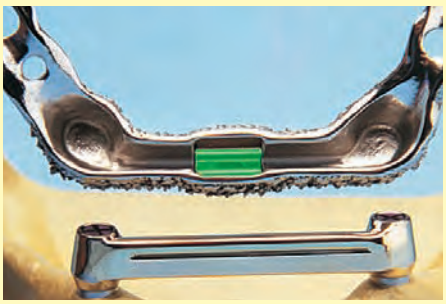
The matrices have a retention of

green 4N yellow 6N red 8N

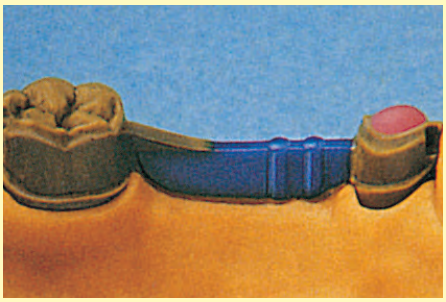








Vario-Soft-profile bar for snap, friction and friction-snap



Vario-Soft-Soft – the conical bar with friction matrices





Wax bars – varied choice for every use

Vario-Soft-Bar-Pattern vsp

The undersides of the resin and titanium bars are rounded to facilitate oral hygiene for the patient.

tested for biocompatibility

The snap-in retention provides for additional grip in the matrix housing. The well proven matrices are colour coded to enable the dentist to determine the degree of friction currently in use and how it can be changed.

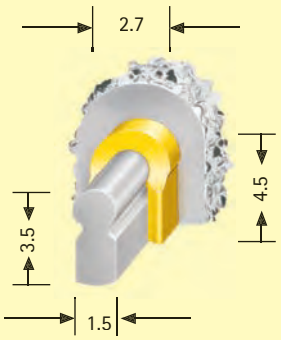


The exterior shape of the matrices are all exactly the same, so that the matrix can be replaced with one providing a different degree of friction.

Titanium bars and high-tech Duroplast matrices, which have been tested for biocompatibility, guarantee the highest possible oral compatibility.

This type of bar has multiple indications if used as an extra-coronal bar stub.





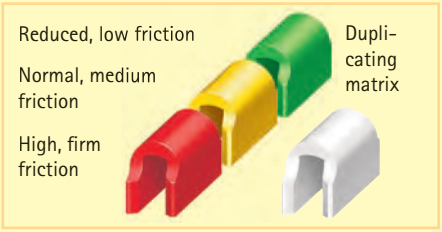


Vario-Soft-Bar-Patterns feature adjustable friction and snap-in effect, matrices with minimal dimensions which can be placed as required, and the possibility to be reduced from beneath.

The reliable and cost-effective bar system with 3 precision matrices each with different degrees of friction for all bar indications.

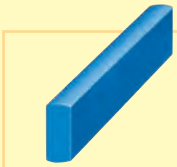
Matrices for parallel bar restorations

Bar patterns made of non-distorting, fully combustible special high-tech Thermoplast, guarantee optimum castings.



Friction matrices vsp-f

	8 pieces	50 pieces
green	**430 0639 0**	**430 0638 0**
yellow	**430 0641 0**	**430 0640 0**
red	**430 0643 0**	**430 0642 0**



Resin bar vsp-f
4 pieces
REF 430 0647 0
25 pieces
REF 430 0646 0



The classic parallel bar can be used for a wide range of indications.

Duplicating matrixes
8 pieces
REF 430 0625 1
50 pieces
REF 430 0624 1

Accessories:

Assortment

20 pieces
Vario-Soft-Bar-Pattern vsp-f, Friction
4 Matrices vsp-f each, red, yellow, green
2 Bars vsp-f
4 Duplicating matrices vsp-f
1 Paralleling mandrel metal vsp-f/fs/gs
1 Insertion pin vsp-f/fs/gs
REF 430 0650 0



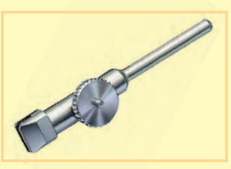
Titanium bar vsp-f
REF 560 0001 0



Matrix housing vsp-f
8 pieces
REF 430 0640 8
50 pieces
REF 430 0645 0



Insertion pin
2 pieces
REF 430 0622 0



Paralleling mandrel
1 piece
REF 430 0623 0

Vario-Soft-Bar-Pattern vsp

Matrices for snap-in bar restorations



Friction snap-in matrices vsp-fs

	8 pieces	50 pieces
green	**430 0632 0**	**430 0633 0**
yellow	**430 0635 0**	**430 0634 0**
red	**430 0637 0**	**430 0636 0**

Assortment

18 pieces
Vario-Soft-Bar-Pattern vsp-fs, Friction-Snap
4 Matrices vsp-fs each, red, yellow, green
2 Bars vsp-fs
1 Paralleling mandrel metal vsp-f/fs/gs
1 Insertion pin vsp-f/fs/gs
REF 430 0649 0



Resin bar vsp-fs
4 pieces
REF 430 0694 0
25 pieces
REF 430 0695 0

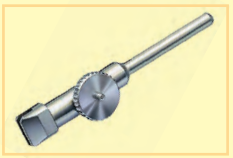


Implant in the lower jaw with a medium friction snap-in bar.

Accessories:



Titanium bar vsp-fs / gs
REF 560 0002 0



Paralleling mandrel
1 piece
REF 430 0623 0



Insertion pin
1 piece
REF 430 0622 0

Matrices for jointed restorations





The **duplicating matrix** guarantees that the joint matrix will grip optimally

Joint snap-in matrices vsp-gs

	8 pieces	50 pieces
green	**430 0627 0**	**430 0626 0**
yellow	**430 0629 0**	**430 0628 0**
red	**430 0631 0**	**430 0630 0**

Duplicating matrixes
8 pieces
REF 430 0625 0
50 pieces
REF 430 0624 0

Assortment

20 pieces
Vario-Soft-Bar-Pattern vsp-gs, joint snap-in
4 Matrices vsp-gs each, red, yellow, green
2 Bars vsp-gs
4 Duplicating matrices vsp-gs
1 Paralleling mandrel metal vsp-f/fs/gs
1 Insertion pin vsp-f/fs/gs
REF 430 0648 0



Resin bar vsp-fs
4 pieces
REF 430 0694 0
25 pieces
REF 430 0695 0



The special, small, replaceable snap-in jointed matrices result in optimum bar joint restorations.

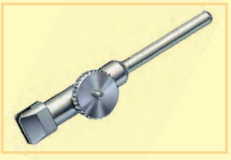
Accessories:



Titanium bar vsp-fs / gs
REF 560 0002 0



Insertion pin
2 pieces
REF 430 0622 0



Paralleling mandrel
1 piece
REF 430 0623 0

Vario-Soft-Bar-Pattern vsp

Dimensions



Product	REF	Length	Width	Height
Bar Friction	430 0646 0	50 mm	1.5 mm	3.5 mm
Bar Friction-Snap/ joint snap-in	430 0695 0	50 mm	1.5 mm	3.5 mm
Matrix Friction	430 0640 0	6.5 mm	3.0 mm	4.5 mm
Matrix Friction-Snap	430 0634 0	5.6 mm	2.7 mm	2.3 mm
Matrix joint snap-in	430 0628 0	5.7 mm	2.7 mm	4.5 mm

Fabricating implant-borne restorations using a parallel bar



The bar should be fitted between the implant abutments with a paralleling mandrel. The bar is made of rigid acrylic which can be trimmed easily and quickly.



After casting and trimming, the bar is secured on the abutments with the paralleling mandrel. They should be soldered together to create a non-stressed unit.



Duplicating is always carried out with the yellow matrix intended for the bar system. This provides the optimum conditions for changing the degree of friction later on.



The restoration is blocked out and duplicated using standard methods. No spacer wax should be applied around the matrix.



The matrix is also duplicated and acts as a spacer for the matrix housing in the chrome cobalt framework.



The bar and matrix are simply coated with wax. The remaining sections of the pattern are waxed up as required.



Before pressing the matrix into its housing in the chrome cobalt framework, check the housing for high spots.

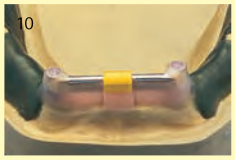


The matrix with the desired degree of friction is selected and pressed in with the inserting instrument. The additional snap-in retainers on the matrix provide optimum hold in the housing.



Shows the unterside of the finished restoration with parallel bar and high, firm friction (red matrix). The friction can be increased or reduced as required by replacing the matrix.

Implant-borne restorations on jointed bars



Once the jointed bar has been soldered and trimmed, the duplicating matrix for the jointed bar snap-in matrix should be placed on it. The underside is blocked out using standard methods. To ensure that the joint matrix fits exactly, the duplicating matrix must not be coated with blocking out wax.



This chrome cobalt framework has been trimmed and checked for high spots and is ready to be fitted with the jointed snap-in matrix with the ideal snapping force for the patient.



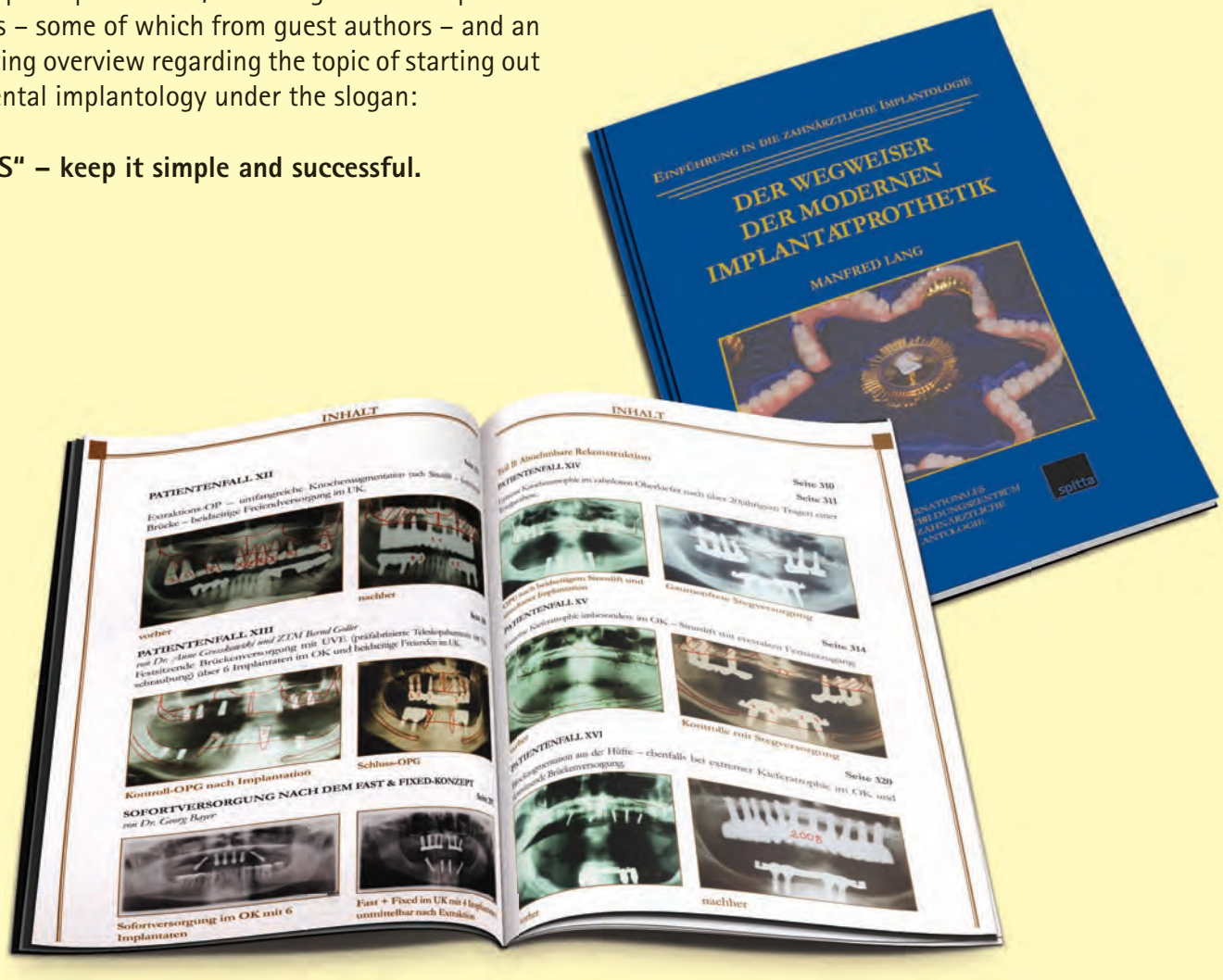
The joint snap-in matrix is easily pressed into the chrome cobalt framework with the inserting instrument.

Prior to duplicating, the implant caps and the vertical bar areas are coated with a wax layer with a thickness of 0.3 mm to allow rotational movement of the denture later on. During this process, however, the rounded occlusal end of the bar must not be coated with wax.

THE GUIDE FOR MODERN IMPLANT PROSTHETICS

A comprehensive guide to the rapid developments in implant prosthetics, including numerous patient cases – some of which from guest authors – and an exciting overview regarding the topic of starting out in dental implantology under the slogan:

„KISS" – keep it simple and successful.



REF 9929700D (German)
REF 992970GB (English)

Vario-Soft-Bar vss

Bar system with three interchangeable versions with different degrees of friction. Gentle to the periodontium.

3 precision matrices with different degrees of friction.



Matrices vss green
8 pieces
REF 430 0527 0
50 pieces
REF 430 0610 0

Reduced, light friction



Matrices vss yellow
8 pieces
REF 430 0526 0
50 pieces
REF 430 0594 0

Normal, medium friction



Matrices vss red
8 pieces
REF 430 0525 0
50 pieces
REF 430 0620 0

High, firm friction



The external dimensions of the matrices are exactly the same, which allows them to be replaced quickly to change the degree of friction

The Snap retainers guarantee retention in the matrix housing

The 4 rounded edges of the matrix create guidance grooves to retain it securely in the removeable section of the denture

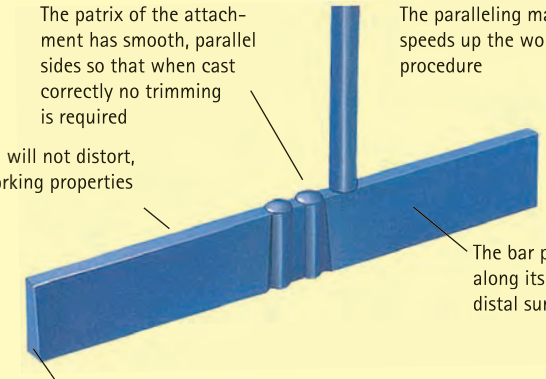


The double matrix technique provides for reliability

Patrices vss
8 pieces
REF 430 0524 0
50 pieces
REF 430 0595 0

Assortment

2 Patrices vss
2 Matrices vss each - red, yellow, green
1 Insertion pin
REF 430 0523 0



The patrix of the attachment has smooth, parallel sides so that when cast correctly no trimming is required

The paralleling mandrel speeds up the working procedure

This special resin will not distort, exhibits ideal working properties and saves time

The bar patrix can be reduced along its base and mesial or distal surfaces as required

The 2° taper simplifies fitting down, particularly if the removeable section consists of chrome cobalt or other non-precious alloy

Accessories:



Insertion pin
REF 430 0736 3

Press fit pin. Practical, small and cost-effective. Facilitates handling for all users.



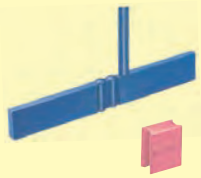
The vss attachment can be shortened by up to half its length, making it ideal for many indications even in cases with complex bites.



The patrix can be fitted perfectly, thus ensuring that the gingiva is protected and that the papilla remain free.



Test the excellent, gentle friction for yourself. Both you and your dentist will be enthusiastic about it.



Dimensions

Product	REF	Length	Width	Height
Bar patrix vss	430 0595 0	48 mm	2.2 / 2°	7.1 mm
Matrix vss	430 0610 0	6.7 mm	3.4 mm	8.0 mm
	430 0594 0	6.7 mm	3.4 mm	8.0 mm
	430 0620 0	6.7 mm	3.4 mm	8.0 mm

The double patrix system requires minimal space, making it perfect for use as an extracoronal attachment.

Vario-Soft-Bar vss

The very gentle friction will impress and enthrall you!



The vss bar patrix can be shortened as required, to suit any particular case. The double patrix can be positioned mesially or distally.



Adapt the underside of the bar to the ridge. The special resin will not distort and is easy and quick to work on.



Shows the bar patrix waxed into place. It can be adjusted with wax at any time.



As the crowns and bar are cast in one piece, no soldering is required and any alloy can be used. This makes the vss ideal for patients with allergies.



The matrix is placed over the double patrices and its underside adapted to fit. The pattern is then blocked out for the chrome cobalt framework, using standard methods.



The model is duplicated with gel or silicone and the investment model is poured. vss can be used with any investment material, thus making it unnecessary to acquire special materials.



The pattern is waxed-up over the matrix reproduced in investment material. This guarantees that the chrome cobalt denture base will fit absolutely precisely.

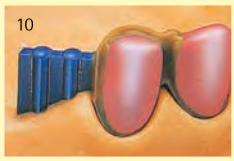


The crome cobalt denture base is fitted down, trimmed and polished. The simple handling and gentle friction will impress you immediately.



Shows the matrix in position. Additional snap retainers guarantee optimum retention in the matrix housing.

Individually adjustable friction within reduced time and at low costs even after several years



The patrix is adapted to the situation and then waxed onto the crown. The papilla remain free, as required.



As it is cast in one piece the casting is a homogeneous structure of one alloy, which prevents stresses.



Once the yellow matrix has been fitted, block out the restoration in readiness for fabricating the chrome cobalt denture base. Ensure that no wax is applied around the matrix.



This ensures that the chrome cobalt structure reaches down to the gingiva and the matrix is retained completely in metal.



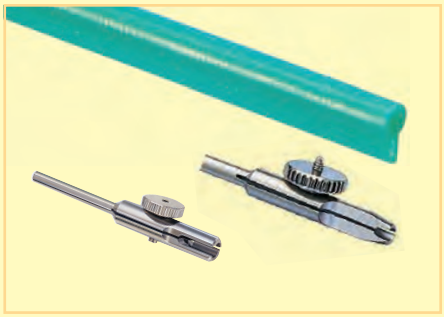
The press fit pin for the matrix is used to insert it precisely into the chrome cobalt denture base.



Thanks to the guidance grooves, the matrix fits the metall housing perfectly. It can be replaced at any time with a matrix with increased or reduced friction.

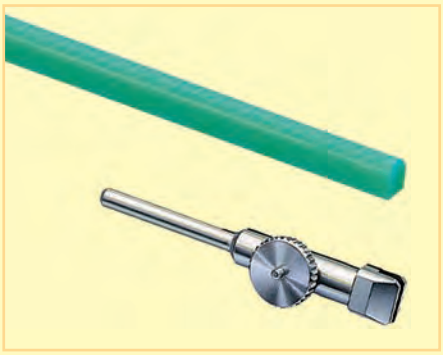
Wax bars

Wax rod attachments wbgs



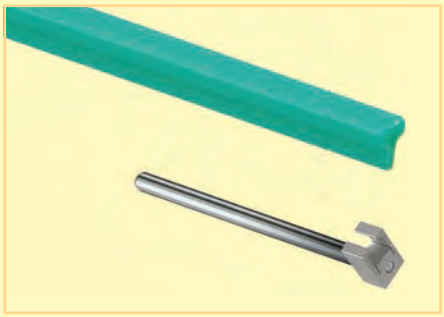
Wax rod attachments	Short designation	REF	Supply form	Order quantity
Head 2 Ø x 50 mm Length	wbgs 2.0	**430 0261 0**	approx. 170 pieces	
Head 3 Ø x 50 mm Length	wbgs 3.0	**430 0262 0**	approx. 90 pieces	
Paralleling mandrel 2.0 for wbgs 2.0	ph 2.0	**430 0263 0**	1 piece	
Paralleling mandrel 3.0 for wbgs 3.0	ph 3.0	**430 0264 0**	1 piece	

Wax bar attachments wsgs



Wax bar attachments	Short designation	REF	Supply form	Order quantity
micro 2.2 bar height x 50 mm	wsgs m 2.2	**430 0271 0**	approx. 250 pieces	
normal 3.0 bar height x 50 mm	wsgs n 3.0	**430 0272 0**	approx. 125 pieces	
Paralleling mandrel 1.6 for wsgs m 2.2	ph 1.6	**430 0623 0**	1 piece	
Paralleling mandrel 2.2 for wsgs n 3.0	ph 2.2	**430 0270 0**	1 piece	

Wax T-attachments wtgs



Wax T-attachments	Short designation	REF	Supply form	Order quantity
Wax T-attachments 2.75	wtgs 2.75	**430 0275 0**	approx. 150 pieces	
Wax T-attachments 3.5	wtgs 3.5	**430 0276 0**	approx. 90 pieces	
Paralleling mandrel 2.75 for wtgs 2.75	phT 2.75	**430 0277 0**	1 piece	
Paralleling mandrel 3.5 for wtgs 3.5	phT 3.5	**430 0278 0**	1 piece	

Dimensions



Product	REF	Ø	Length	Width	Height	Max. reduction
Wax rod attachments	430 0261 0	Head 2.0 mm	50 mm	2.0 mm	4.5 mm	individual
	430 0262 0	Head 3.0 mm	50 mm	3.0 mm	5.5 mm	individual
Wax bar attachments	430 0271 0	–	50 mm	2.2 mm	1.5 mm	individual
	430 0272 0	–	50 mm	2.2 mm	3.0 mm	individual
Wax T-attachments	430 0275 0	–	50 mm	2.75 mm	3.4 mm	individual
	430 0276 0	–	50 mm	3.5 mm	4.75 mm	individual

Sender (stamp):

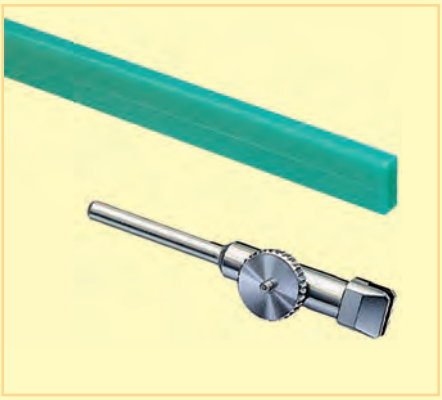
Customer No.

Date, signature

Additional order:

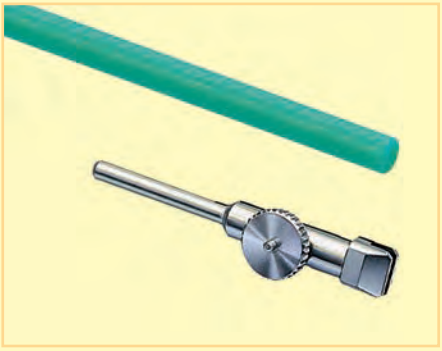
Wax bars

Wax bars wstg



Wax bars	Short designation	REF	Supply form	Order quantity
1.6 x 8 x 50 mm	wstg 1.6	**430 0265 0**	approx. 65 pieces	
1.9 x 4 x 50 mm	wstg 1.9	**430 0266 0**	approx. 120 pieces	
2.2 x 6 x 50 mm	wstg 2.2	**430 0267 0**	approx. 65 pieces	
Paralleling mandrel 1.6 for wstg 1.6	ph 1.6	**430 0623 0**	1 piece	
Paralleling mandrel 2.2 for wstg 1.9 and wstg 2.2	ph 2.2	**430 0270 0**	1 piece	

Wax bar hinges wsgl



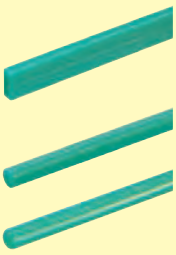
Wax bar hinges	Short designation	REF	Supply form	Order quantity
micro 2.2 bar height x 50 mm	wsgl m 2.2	**430 0273 0**	approx. 300 pieces	
normal 3.0 bar height x 50 mm	wsgl n 3.0	**430 0274 0**	approx. 160 pieces	
Paralleling mandrel 1.6 for wsgl m 2.2	ph 1.6	**430 0623 0**	1 piece	
Paralleling mandrel 2.2 for wsgl n 3.0	ph 2.2	**430 0270 0**	1 piece	

Round wax bars wstr



Round wax bars	Short designation	REF	Supply form	Order quantity
1.5 Ø x 50 mm	wstr 1.5	**430 0279 0**	approx. 400 pieces	
1.8 Ø x 50 mm	wstr 1.8	**430 0280 0**	approx. 300 pieces	
2.0 Ø x 50 mm	wstr 2.0	**430 0281 0**	approx. 250 pieces	

Dimensions



Product	REF	Ø	Length	Width	Height	Max. reduction
Wax bars	430 0265 0	–	50 mm	1.6 mm	8.0 mm	individual
	430 0266 0	–	50 mm	1.9 mm	4.0 mm	individual
	430 0267 0	–	50 mm	2.2 mm	6.0 mm	individual
Wax bar hinges	430 0273 0	–	50 mm	1.4 mm	2.2 mm	individual
	430 0274 0	–	50 mm	2.1 mm	3.0 mm	individual
Round wax bars	430 0279 0	1.5 mm	50 mm	–	–	individual
	430 0280 0	1.8 mm	50 mm	–	–	individual
	430 0281 0	2.0 mm	50 mm	–	–	individual

Sender (stamp):

Customer No.

Date, signature

Additional order:

NEW OPPORTUNITIES FOR SUCCESS

FURTHER TRAINING AT AND WITH THE BREDENT GROUP ACADEMY



We strive to be amongst the best. In this spirit, we have reviewed our course programme and the results are now being introduced under the bredent group academy banner.

The bredent group academy course programme is aligned to the strategic direction of the bredent group. On the one hand, we have the part that is in line with the market, oriented towards tailored solutions to meet the needs of the market. Such solutions have been developed according to the specific segment. By contrast, there is the market-oriented segment. This is geared towards a changing market, such as economic cycles and trends.

However, it is far more important to recognise users' wishes from the outset. This means being intuitive to what users want and need, and knowing what the future holds - in terms of materials, systems and treatment concepts. Only this way can we as a manufacturer ensure that our company progresses and understands the associated obligations to inform, support and help you, as our client, on the path to commercial success.

Further training is a key component of this duty, since the cornerstone for new technology and a smooth transfer of knowledge are being laid. The instructors are the life of this course – all of them experts in their field – equipped with the vision and the necessary drive to develop innovations and put them into practice. This programme unites these visions and appeals to those who never cease to develop themselves further.

The individual development and optimisation of your practice, your laboratory and your marketing has a decisive effect on realising success in your practice or laboratory, your income and therefore your abilities, ideas, wishes and dreams.

A new range of events in the areas of patient communication, hygiene, conflict management, practice marketing, data protection and social media, in addition to the exciting beginners' and improvers' courses in implantology and dental technology, can help you become even more successful. Not only is further training at the forefront of your professional qualifications, but so too is positioning your business as a successful brand on the market.

Join us and strive to be amongst the best – for the benefit of you and your patients!

Scan this QR code with your smartphone!

Find out more about our course programme at www.bredent.com.

Lock

Swivel-type lock or locking pin? bredent offers cost-effective solutions for secure, fixed, removable dental prostheses which creates a secure feeling for the patient. Simple processing and handling of the lock ensures a high level of comfort.

Indications
- Extracoronal applications
- Plastic fitting
- Model casting fixation

Product variations
- Swivel-type lock sr and src – easy operation for patients
- Locking Pin bs1 – the individual locking pin
- KS-Lock – assembled push lock
- Locking Pin Easy-Snap – offers secure grip with simple handling
- Locking Pin Snap-System – the versatile lock!
- Activatable locking pin – individual friction adjustment possible

Properties
- Cost-effective purchase
- Time-saving and secure processing
- Cost-effective solutions

Materials
- Titanium
- Precious metal



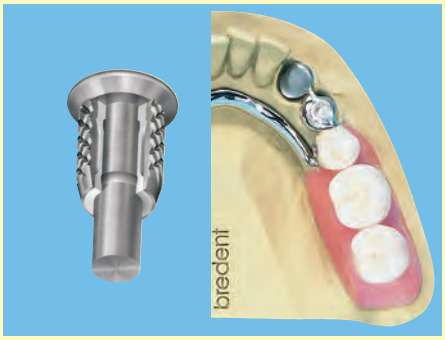
KS Lock – assembled push lock



Locking pin Easy-Snap – offers secure grip with simple handling



Swivel-type lock sr and src – easy operation for patients



Locking pin Snap-System – the versatile lock!



Locking pin bs1 – the individual locking pin



Activatable locking pin – individual friction adjustment possible

Swivel-type lock sr

These particularly slender patterns can be used for a wide range of custom applications for all removable, passive designs – perfect for implants.



Assortment

14 pieces
Swivel-type lock sr left + right
REF 430 0736 2

Assortment

14 pieces
Swivel-type lock sr left
REF 430 0730 5



Latch retainer with integral shear distributor
left, 4 pieces
REF 430 0735 8
right, 4 pieces
REF 430 0735 9



Latch tongue
4 pieces
REF 430 0735 7

Assortment

14 pieces
Swivel-type lock sr right
REF 430 0730 6



Latch tongue and latch box



Shear distributor housing
left, 4 pieces
REF 430 0730 9
right, 4 pieces
REF 430 0731 0



Latch box
4 pieces
REF 430 0735 6



Oxide-steel pins
20 pieces
REF 430 0293 0



Latch spring
Guaranteed for 5 years
10 pieces
REF 430 0334 0



Latch tongue and latch box in a shear distributor housing

Cross-section through the Latch System sr



locked



unlocked



Fully assembled Latch System sr

Accessories:



Paralleling mandrel universal
1 piece
REF 360 0115 1

Swivel-type lock sr

This cost-effective latch allows you to calculate your prices to optimize your profit.



Classic shear distributor with Interlock and a complete latch system. The chrome cobalt framework and latch system were luted with dtk without creating stresses.



Latch box with individually modelled latch box housing. Ideal when minimal space is available.



Construction of a monoreducer with integrated shear distributor. The usage of the latch box housing avoids modelling of the shear distributor.

Applications for combined fixed/removable appliances with classic shear distribution arms



The latch retainer can be fitted onto the papillae accurately.



The non-soldered, one-piece casting reduces the costs and the number of alloys used in the mouth.



The shear distribution arm pattern is built up with Pi-Ku-Plast brush-on resin to guarantee that all details are reproduced.



The latch system provides numerous combinations for fabricating custom restorations.

Applications for combined fixed/removable appliances with a space-saving latch retainer



As the latch retainer is designed to fit around the papillae, it can be waxed close to the crown with a paralleling mandrel.



The shear distributor shoulder on the patrix eliminates the need for labour intensive milling, which saves time and money.



The slender design of the latch system allows the shear distributor housing to be waxed up as required.



The restoration is designed so as not to stress the abutment teeth.

„Monoreducer" with integral shear distributor and custom designed latch box housing



Patrix with integral milled shoulder for the shear distributor - saves time and space.



The latch tongue swivels horizontally into the latch retainer.



The latch system is very easily assembled.



Once the latch has been opened, the partial denture can be released without stressing the abutment tooth.

Dimensions



Product	REF	Length	Width	Height	Ø
Latch retainer	430 0735 9	4.0 mm	2.9 mm	4.3 mm	–
Latch tongue	430 0735 7	5.8 mm	3.8 mm	2.9 mm	–
Latch box	430 0735 6	6.2 mm	5.0 mm	2.9 mm	–
Shear distributor housing	430 0731 0	6.4 mm	5.9 mm	4.8 mm	–
Oxide-steel pins	430 0293 0	10.0 mm	–	–	1.0 mm

Swivel-type lock src

Ceramic spacer for the simple fabrication of locks in the one-piece casting technique.
Swivel-type locks for CoCr restorations: low-cost, accurate and time-saving.





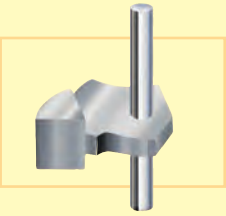
Wax latch retainer
- is cast together with the anchor crowns, hence reduction of metals in the mouth
- integrated shear distributor provides enhanced esthetics and simplifies the fabrication



Ceramic latch blade with lock axle
- Latch box premodelled in wax, hence quick fabrication is possible
- is integrated into the CoCr model
- only sandblasting required after casting
- creates precise fitting surfaces for metal, latch blade and latch axle



Latch spring
- determines the position of the lock blade when locked or unlocked and provides additional safety for the patient



Titanium latch blade
- shape matched exactly with the ceramic lock blade prefabricated precision lock blade
- ensures efficient processing

Latch axle
- stainless-steel, hence orally stable
- matches exactly with the ceramic spacer for the latch axle, simplifies the integration

High-precision ceramic patterns are available which reduce the amount of work tremendously and simplify the fabrication of an individual lock. The ceramic pattern designs are based on the design of the latch blade and the latch axle so that they fit exactly into each other. The latch box is cast in one piece together with the CoCr structure using the one-piece casting technique. Soldering is not required. Accordingly, the amount of alloys used intraorally is reduced and the costs for individual lock restorations are lowered.



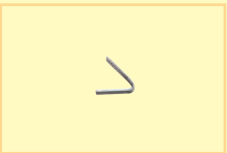
Latch blades src ceramic
2 pieces
REF 430 0738 5



Latch retainer left
4 pieces
REF 430 0735 8



Latch retainer right
4 pieces
REF 430 0735 9



Latch spring
10 pieces
REF 430 0334 0



Latch tongue titanium
2 pieces
REF 430 T735 7

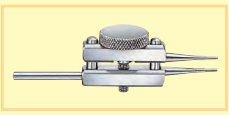


Oxide-steel pins
20 pieces
REF 430 0293 0

Assortment

10 pieces
Latch tongue src left + right
REF 430 0738 8

Accessories:



Paralleling mandrel universal
1 piece
REF 360 0115 1

Swivel-type lock src

Ceramic spacer for the simple fabrication of a latch retainer.



The latch retainer is waxed with the paralleling mandrel to the primary construction according to the path of insertion. When producing a bar restoration, the integrated shear distributor may be covered with wax.



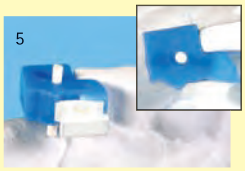
After casting, prepare the model for duplicating. Block out the lock of the latch retainer so that approx. 0.5 mm of the margin remains visible after duplicating.



The latch retainer can be easily seen on the investment model. The ceramic pattern can be safely positioned in the lock.



Trim the ceramic pattern with a separating disc in a way that it fits precisely into the lock of the latch retainer and ...



... ends exactly at the latch retainer but can still be positioned safely in the lock of the latch retainer.



Fix the ceramic pattern with the axle and attach with wax.



Complete the model in accordance with the situation and integrate the ceramic pattern. The axle should stand out on both sides of the model.



The titanium swivel-type lock is fitted into the sandblasted housing. Put the latch spring behind the titanium swivel-type lock and fix with the axle.

Dimensions



Product	REF	Length	Width	Height	Ø
Latch retainer	430 0735 9	4.0 mm	2.9 mm	4.3 mm	–
Latch tongue titanium	430 T735 7	5.8 mm	3.8 mm	2.9 mm	–
Oxide-steel pins	430 0293 0	10.0 mm	–	–	1.0 mm

Locking Pin bs 1

The lock axles can be shortened according to the respective sitiuation and an individual unlocking lens can be added.



The locking pin bs 1 is perfectly suitable for the use in the anterior area. The lock can be opened using a bent wire and then the denture can be removed.



The locking pin bs 1 can be used individually.
Thanks to its size the locking pin bs 1 is perfectly suitable for unilateral removable dentures. An undercut can be integrated into the pin axle to open it.



The completely individual solution:
The unlocking lens is prepared individually using denture resin or composite. This way the unlocking device is no longer visible.

Refill packages



Pin axles
2 pieces
REF 450 0006 4



Bolt screws
2 pieces
REF 450 0006 5



Wax screws
2 pieces
REF 430 0748 2



Wax sleeves 2.0/1
2 pieces
REF 450 0007 2



Auxiliary modelling elements 2.0 x 3.5
2 pieces
REF 450 0007 0



Auxiliary modelling element 2.0
2 pieces
REF 450 0006 3



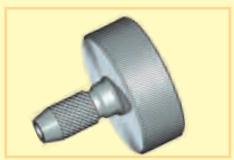
Auxiliary modelling elements 1.3
2 pieces
REF 450 0007 1



First tap M 1.6
1 piece
REF 330 0116 V



Last tap M 1.6
1 piece
REF 330 0116 F



Tap handwheel
1 piece
REF 330 0115 3



Tungsten carbide center drill Ø 1.4
1 piece
REF 330 0066 0



Diatit-Multidrill spiral drill 2.0
1 piece
REF 330 0072 0

Accessories:



Milling and drilling oil
20 ml
REF 550 0000 8



Assortment

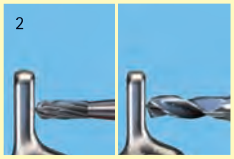
17 pieces
Locking Pin bs 1
REF 450 0006 2

Locking Pin bs 1

Type 1: Bolt screw in metal framework



Wax up the pattern using standard methods. The prefabricated wax bar (REF 430 0265 0) is perfectly suitable to allow quick fabrication.



Prepare a small depression with the center drill and drill a hole through the bar using the Diatit-Multidrill spiral drill.



Assemble the auxiliary modelling elements 2.0 and 1.3 and position them in the drill hole so that between primary element and auxiliary element 1.3 ...



... a minimum space of 1.5 mm is obtained. Fix the auxiliary modelling elements with Pi-Ku-Plast.



Complete the model in accordance with the situation. Remove the auxiliary modelling elements, invest and then cast.



After casting, cut the thread with the taps whilst adding a rich quantity of milling and drilling oil.



Cut the lock axle according to the respective situation. Add an unlocking device and fix the pin axle with the bolt screw.



The individually fabricated locking pin can also be used if only limited space is available.

Type 2: Bolt screw in resin saddle



Insert the auxiliary modelling element 2.0 x 3.5 in the center of the drill hole as spacer for the investment model. Prepare the model for duplicating.



Place the wax sleeves on the investment model to obtain an accurate, uniform wall thickness of the model.



Complete the model (waxing up). The plugs of the auxiliary modelling element remain visible.



Fix the wax screw in the auxiliary modelling element 2.0 and fit it in the drill hole. There must be a distance of 1 mm between the wax screw and the secondary construction.



After completion the wax screw is removed with steam. Precise has been achieved in the resin which safely accepts the bolt screw. The pin axle is cut individually and an unlocking device is added. If required, the lock axle can be veneered in a suitable shade. A reliable, simple solution for any type of removable dentures.

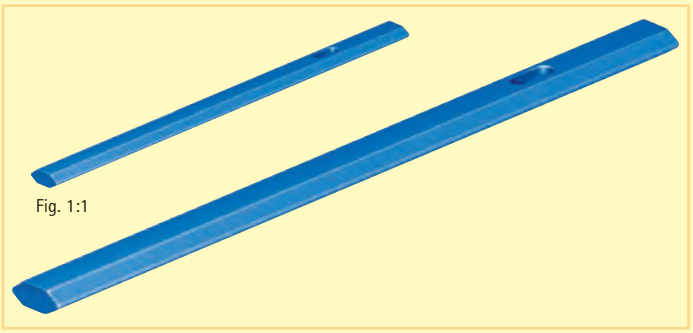


Dimensions

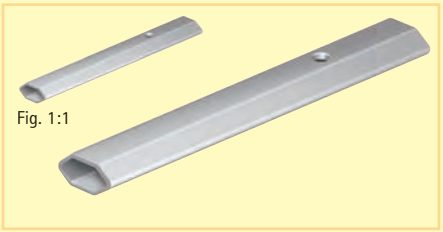
Product	REF	Ø/Thread	Length	Max. reduction
Pin axle	450 0006 4	2.0 mm	15.0 mm	individual
Bolt screw	450 0006 5	M 1.6 x 0.35	4.4 mm	–

KS-lock



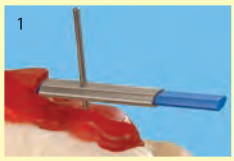


Locks
2 pieces
REF 450 0007 9



Titanium sleeves
2 pieces
REF 450 0007 8

Prefabricated sliding lock with individual opener.
- limited number of components
- simple design
- can be shortened individually
- individual design of opener
- for motorically handicapped patients
- snap mechanism when locking and unlocking
- perfectly suitable for implant structures



Use resin to model the primary element with a retainer for the lock. For this purpose attach the lock with titanium sleeve.



Try the lock with titanium sleeve in the cast primary element.



Primary element prepared for the supraconstruction – with or without electroplating.



Supraconstruction fabricated for the veneer.



Glue the titanium sleeve into the supraconstruction.



Fit the cast lock with the customized opener into the construction.



The opened lock with individually designed opener. Perfectly suited for motorically handicapped patients.

Dimensions



Product	REF	Ø	Length	Width	Height	Max. reduction
Lock	450 0007 9	–	50 mm	3,3 mm	1.8 mm	individual
Titanium sleeve	450 0007 8	–	25 mm	4.5 mm	2.3 mm	individual

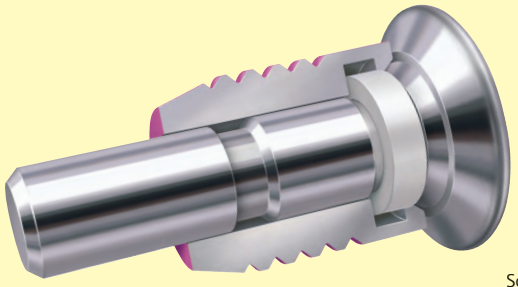
Locking Pin Easy-Snap



Perfect locking pin system for secure grip of the prosthesis.
Its small size permits versatile use.

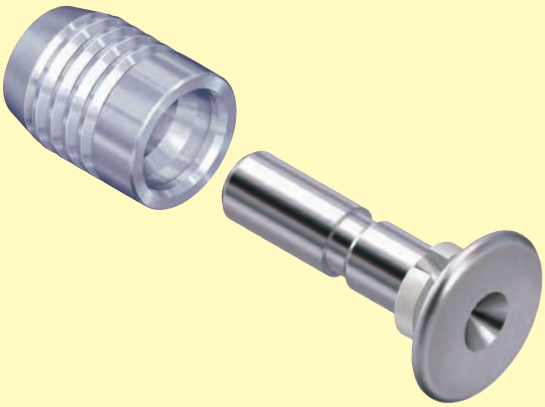
- New mechanism provides secure hold for the prosthesis
- Noticeable snap when opening and closing gives patients more security
- Small size for every situation
- Can be used even in difficult locations
- Simple fitting possible in three variants





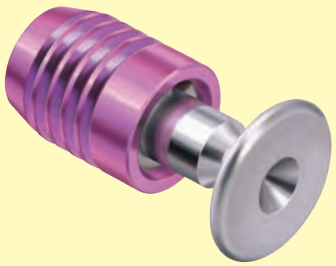
Scale = 10:1

The snap ring offers secure grip when opening and closing the locking pin axis. The simple mechanism offers the highest degree of security.



The castable variant allows for use regardless of the alloy.

Castable up to 1800°C.



The polymerisation of the locking pin leaves all options open. Simple use for beautiful teeth!

Locking Pin Easy-Snap E

**The primary construction is always prepared in the same manner for every application.
This reduces the need for clarification and accelerates the manufacturing process.**


1

Simple modelling of the primary construction according to the model situation. A set-up for exactly determining the position of the lock is always advantageous.


2

The hole is measured using the centre drill. Slipping of the Diatit multidrill is thus prevented.


3

Drilling is simplified using drilling and milling oil. Drill only once, as this prevents the formation of an oval hole.


4

The hole is closed with the wax.


5

The wax is removed again by hand with the Rapidy 2.0. In doing so, a slight hollow is created which positions the investment material model exactly.


6

The model is completely prepared for doubling. If you are working in the withdrawal procedure, omit this step.


7

Cast the investment material model using the bredent doubling system. The high level of design accuracy of the investment material facilitates further processing.


8

The wax guide is fixed lightly in the cast mould. The framework is modelled with a minimum thickness of 0.5 mm.


9

The wax guide is removed and an image is created for the locking pin.


10

The exit hole for the locking pin is easily recognisable on the opposite side.


11

The locking pin is fixed in the correct position for completion with Qu-resin.


12

The prosthesis is completed.

Accessories:



Tungsten carbide center drill
REF 330 0066 0



Diatit-Multidrill
REF 330 0073 0



Rapidy Microbur
REF H001 NH 21



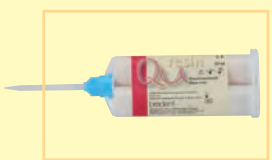
Milling and drilling oil
20 ml
REF 550 0000 8



DTK adhesive
REF 540 0010 6



FGP insulating liquid
REF 540 0102 7



Qu-resin dentin
50 ml cartridge
REF 540 0116 6

Qu-resin rosa
50 ml cartridge
REF 540 0116 5



Pi-Ku-Plast resin
REF 540 0017 3

Assortment small
REF 540 0019 6

Locking Pin Easy-Snap A

Sleeves made from platinum-iridium alloy offer time-saving processing for precious metal and non-precious metal constructions, with the exception of titanium.



For patients with less dexterity, the lock can be constructed in such a way that it can even be opened with a thin object from the buccal side. An individual stop must be fitted to this so that the lock is not opened accidentally.



The individual bridge sectioning attachment is suitable for wax modelling. Rapid modelling saves time.



Manufacturing out of brealloy enables a space-saving model to be created for an aesthetic dental prosthesis.



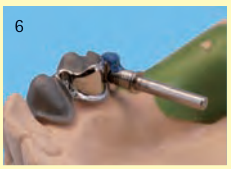
The position of the lock is measured using the centre drill and a small mould is fitted.



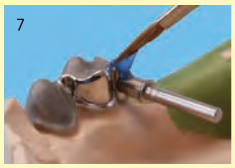
The hole is drilled for the locking pin using the Diatit-Multidrill with copious amounts of milling and drilling oil.



The small amount of space required by the Locking Pin Easy-Snap facilitates problem-free positioning of the bore hole in the male part.



The locking pin sleeve which can be cast on, is fitted to modelling pin A and pushed into the locking hole of the patrix until it stops.



The modelling pin A with Locking Pin sleeve which can be cast on is moulded with Pi-Ku-Plast to its largest diameter.



The blue clip forceps hold the modelling pin steady whilst removing this from the model. The sleeve which can be cast on remains within the model.



The modelling is carried out and cast in accordance with the bredent casting technique. The sleeve is fixed in the correct position with the investment material.



In order not to damage the sleeve which can be cast on, the investment material is blasted with glass beads. This means that it maintains its shape and performs the correct function.



The snap ring is set on the impression pin and pressed into the sleeve. It springs into its planned position.

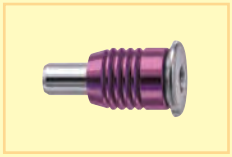


The lock axis is then pushed in. The lock holds firm due to the mechanism and offers the patient the highest level of comfort.

Locking Pin Easy-Snap

Bonding/polymerisation of locking pin Easy-Snap E





Locking Pin Easy-Snap E
1 piece
REF 440 0N65 8

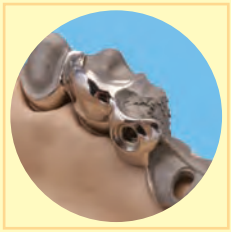


Ceramic spacer E
2 pieces
REF 440 0065 7



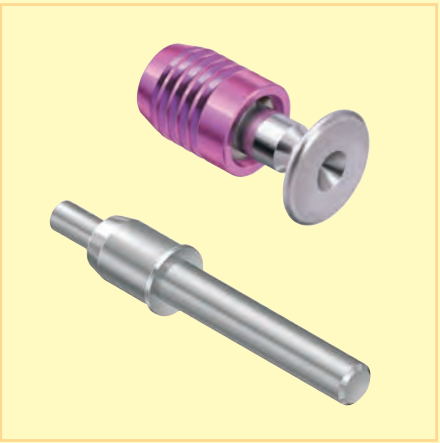
Device for waxing-on
1 piece
REF 440 0066 1

Moulding of Locking Pin Easy-Snap A





Locking Pin Easy-Snap A
1 piece
REF 440 0N65 9



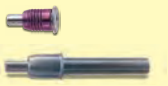
Locking Pin Easy-Snap E
1 piece
REF 440 0N65 8

Modelling pin E
1 piece
REF 440 0065 6



Locking Pin Easy-Snap A
1 piece
REF 440 0N66 0

Modelling pin A
1 piece
REF 440 0N65 5



Scale 1:1

Assortment
4 pieces
Locking Pin Easy-Snap E
2 Locking Pin Easy-Snap E
2 Modelling pin E
REF 440 0N65 2



Scale 1:1

Assortment
4 pieces
Locking Pin Easy-Snap A
2 Locking Pin Easy-Snap A
2 Modelling pin E
REF 440 0N65 4



Assortment
5 pieces
Locking Pin Easy-Snap E Model casting fitting
2 Locking Pin Easy-Snap E
2 Ceramic spacer E
1 Device for waxing-on
REF 440 0N65 3



Assortment
3 pieces
Locking Pin Easy-Snap E Plastic fitting
2 Locking Pin Easy-Snap E
1 Device for waxing-on
REF 440 0N65 1

Accessories:

Snap ring
10 pieces
REF 440 0N66 3

Matrix inserting instrument
1 pieces
REF 440 0N66 2

Locking Pin Snap System

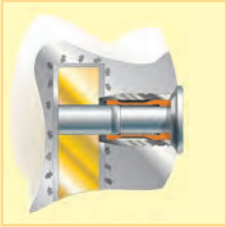
Suitable for numerous applications in combined work.





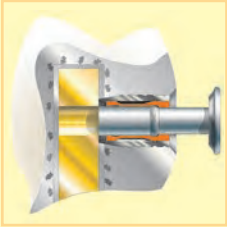


The soft, resin-supported guidance results in a soft snap of the locking pin during locking in the closed or open position.



closed

The snap ensures safe locking in closed position.



open

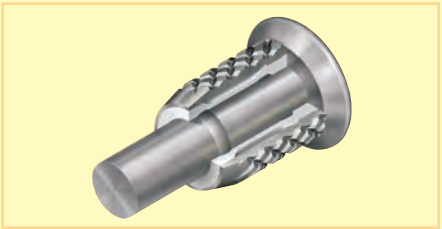
The snap informs the patient that the lock is completely open and the denture can be removed.

Locking Pin Snap E

The alloy is not relevant









Original Size

All metal parts are made of titanium. The biocompatible plastic matrix provides long service life and soft snap-friction.

Locking Pin Snap A

Fast and precise integration in precious metal supply





The platinum-iridium-containing alloy of the locking pin sleeve allows to save much time and ensures high precision when casting onto the metal framework.

Locking Pin Snap E

Glueing in the chrome cobalt framework





Locking Pin E
1 piece
REF 440 0065 8



Ceramic spacer E
2 pieces
REF 440 0065 7



Device for waxing-on
1 piece
REF 440 0066 1

Integration in resin



Assortment
5 pieces
Locking pin snap E for integration in chrome cobalt
2 Locking Pin E
2 Ceramic spacer E
1 Device for waxing-on
REF 440 0065 3

Assortment
3 pieces
Locking pin snap E for integration in resin
2 Locking Pin E
1 Device for waxing-on
REF 440 0065 1

Accessories:



Tungsten carbide center drill
REF 330 0066 0



Diatit-Multidrill
REF 330 0073 0



Rapidy Microbur
REF H001 NH 21



Milling and drilling oil
20 ml
REF 550 0000 8



Wax bars wstg
1.6 x 8.0 mm
REF 430 0265 0



FGP insulating liquid
REF 540 0102 7



DTK adhesive
REF 540 0010 6

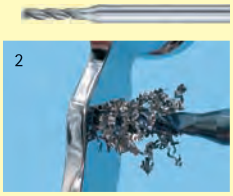
Locking Pin Snap E



Waxing up of the pattern and casting is carried out using standard methods.



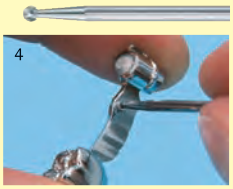
The position of the locking pin is determined with the centre drill and a small depression is prepared.



The hole for the pin is drilled with the Diatit Multidrill with a diameter of 1.5 mm.



The hole for the pin is filled with wax before duplicating.



A depression is scraped on both sides using a Rapidy Microbur 2.1 mm.



The pattern is prepared for duplicating and duplicated in the usual way.



Exact reproduction of the depressions on the bar is required.



The ceramic spacer E is exactly positioned with the device for waxing on.



The ceramic spacer E is integrated into the wax pattern up to its largest diameter.



The spacer is sandblasted with a maximum grain size of 110 µ at a pressure of 4 bar.



In order to try the function, the pin is inserted into the assembled construction.

Glueing in of Locking Pin Snap E.

Contact points that must not be glued must be covered with FGP insulating liquid.



The hole in the bar and 2-3 mm in the vicinity.



The contact area of the locking pin lens at the secondary element.



The locking pin stud up to the locking pin sleeve.



The contact area of the locking pin lens at the secondary element.



Primary and secondary element are assembled. A drop of DTK adhesive is evenly spread in the hole in the secondary element.



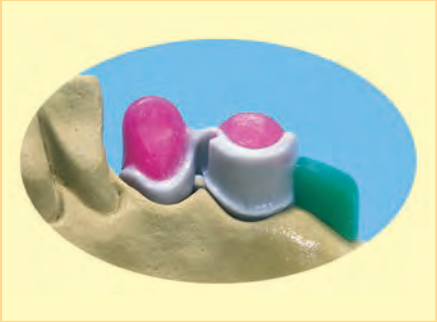
The locking pin sleeve is covered with a thin layer of DTK adhesive and pressed into the secondary element. Excess adhesive residues are removed after hardening of the DTK adhesive.



Locking Pin Snap E

Locking Pin Snap E for integration in resin.

Easy, fast and secure integration.



The crown is modelled with a shear distributor with interlock and the end of the bar is waxed on.



Casting and polishing are carried out after casting.



A small depression is prepared with the Diatit centre drill and in this way the position of the drillhole is determined.



The Diatit-Multridrill is safely fixed by centering.



The hole for the pin is filled with wax before duplicating.



A depression is scraped on both sides of the Locking Pin patrix using a Rapidy Microbur 2.1 mm.



The pattern is prepared for duplicating and duplicated.



The small depressions are reproduced in the investment compound model.





The plugs of the device for waxing-on lock in position in the depressions.



The cylindrical plugs are integrated in the pattern using modelling wax.



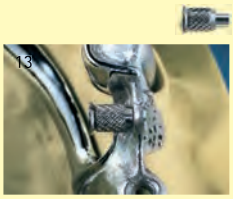
This way two round apertures are obtained on both sides.



The two apertures are parallel to the axis due to the drilled hole.



The holes are prepared using a Diatit-Multidrill with a diameter of 1.5 mm.



The Locking Pin is easily tried in.



The Locking Pin is fixed to the chrome cobalt framework using resin.

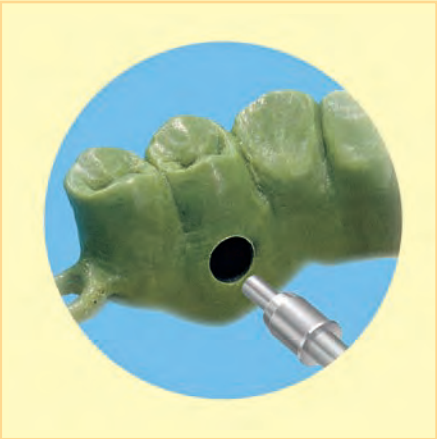


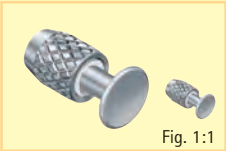
The Locking Pin lens is integrated into the wax pattern up to its outer margin and the denture is completed.

Locking Pin Snap

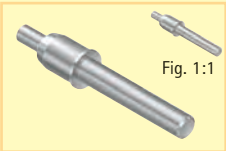
When the wax pattern is lifted from the model in order to invest it, there are two options:

Glueing in
Locking Pin Snap E





Locking Pin Snap E
1 piece
REF 440 0065 8



Modelling pin E
1 piece
REF 440 0065 6

Assortment

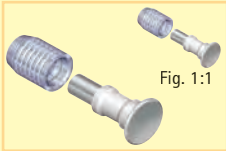
4 pieces
Locking Pin Snap E
2 Locking Pin Snap E
2 Modelling pin E
REF 440 0065 2

Assortment

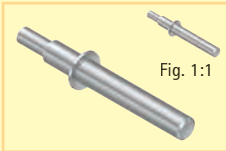
4 pieces
Locking Pin Snap A
2 Locking Pin Snap A
2 Modelling pin A
REF 440 0065 4

Casting in
Locking Pin Snap A





Locking Pin Snap A
1 piece
REF 440 0066 0



Modelling pin A
1 piece
REF 440 0065 5



Locking Pin Snap
1 piece
REF 440 0065 9

Accessories:



Tungsten carbide center drill
REF 330 0066 0



Wax bars wstg
1.6 x 8.0 mm
REF 430 0265 0



DTK adhesive
REF 540 0010 6



Diatit-Multidrill
REF 330 0073 0



Pi-Ku-Plast resin
REF 540 0017 3

Assortment small
REF 540 0019 6



Milling and drilling oil
20 ml
REF 550 0000 8



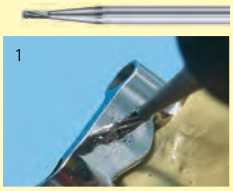
FGP insulating liquid
REF 540 0102 7

Locking Pin Snap E

Integration of Locking Pin snap in any alloy.



The wax bars by bredent are fitted in individually.



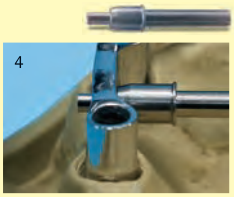
The position of the locking pin is determined with the centre drill and a small depression is prepared.



The Diatit-Multridrill is safely positioned by centering.



Thanks to little space required by the Locking Pin snap, the hole can be easily positioned in the patrix element.



The modelling pin E is inserted in the patrix hole up to the stop.



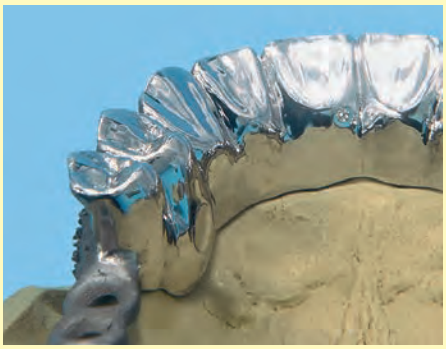
The modelling pin E is integrated in the pattern using Pi-Ku-Plast resin and modelling wax.



After completion of the pattern, the modelling pin E is removed by turning it slightly with a pair of pliers.

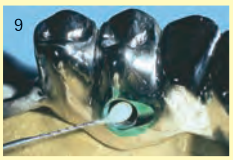


The investment compound in the Locking Pin housing is sandblasted with a grain size of 110 µ and a pressure of 4 bar.





Insulating and glueing in are carried out as described on page 199.



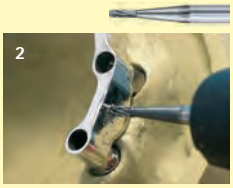
Locking Pin Snap A

Time-saving casting-on to precious metal secondary constructions.





The wax bars by bredent are fitted in individually.



The position of the locking pin is determined with the centre drill and a small depression is prepared.



The bar is perforated with the Diatit-Multi-drill whilst adding rich quantities of milling and drilling oil.



Thanks to the little space required by the locking pin snap, the hole can be easily positioned in the patrix element.



The cast-on locking pin sleeve is put onto the modelling pin A and inserted into the locking pin hole of the patrix up to the stop.



The modelling pin A with the cast-on locking pin sleeve is integrated in the pattern up to its largest diameter using Pi-Ku-Plast resin and modelling wax.



After waxing up, the modelling pin A is removed with a slight turn.



In order not to damage the cast-on locking pin sleeve, the investment compound is removed with glass beads.



The Locking Pin Snap is pressed in the locking pin sleeve that has been cast in.



Dimensions



Product	REF	Ø Axle	Ø Ring	Length	Ø	Max. reduction
Locking Pin Snap	440 0065 8	1.5 mm	3.5 mm	6.25 mm	–	–
Locking Pin Snap sleeve	440 0066 0	2.8 mm	–	3.6 mm	2.8 mm	–

Locking Pin activatable

Universal active. The pin can be located on either the oral or buccal surfaces.





Locking pin: Resistant to the oral environment. Made of special steel, with spark eroded activating slot and wax spacer.

Assortment

Pack of 2 sets
Locking pin system*
1 blocking out matrix
2 locking pin matrices
2 locking pin patrices
1 steel pin 1.5 mm
2 locking pins, activatable
REF 430 0445 0



The metal matrix preformer ensures that the pin guidance is absolutely parallel.



Locking pin matrix: This prefabricated wax matrix reduces the time required when waxing-up chrome cobalt appliances.



Locking pin patrix with concave surface for waxing onto the pattern.



„Mini" locking pin: The smallest in the bredent Locking Pin System.

Assortment

Pack of 2 sets
Locking pin system mini*
1 blocking out matrix
2 locking pin matrices
2 locking pin patrices
1 steel pin 1.5 mm
2 locking pins, activatable
REF 430 0460 0



The „Mini" locking pin matrix, simplifies fitting of the locking pin.



„Mini" locking pin patrix: Saves space, ideal for anterior use.

*** For further information see price list.**



The pin viewed from the lingual direction. The pin passes through an extracoronal retaining lug.



This pin can be operated from the buccal aspect.



The spark eroded activating slot is simply activated from the underside.

Locking Pin activatable

Locking Pin System



Wax-up the pattern using standard methods, and then use the paralleling mandrel to wax the patrix into place.



Adapt the underside of the patrix to fit the model and integrate it into the shear distributor.



Trim and polish the framework before applying the porcelain.



Place the matrix pre-former in position and secure it with the oxidized steel pin. Block out the underside.



Remove the matrix pre-former and fill the pin aperture with wax, leaving a slight depression.



Position the wax matrix correctly on the investment model.



Wax-up the denture base framework using standard methods.



Shows the chrome cobalt framework after casting and trimming. The apertures for the pin have been aligned accurately.



Shows the try-in, with temporary pin made of clasp wire.



Insert the pin until the wax sleeve touches the chrome cobalt framework.



Shows the completed saddle: The locking pin is pulled to open it.



Viewed from the underside. The slot in the pin enables it to be activated easily.

Dimensions



Product	REF	Ø Axle	Length	Width	Height	Ø Ring
Locking pin	430 0459 0	1.5	6.2 mm	–	–	2.9 mm
Locking pin, mini	430 0500 0	1.5	4.5 mm	–	–	2.9 mm
Locking pin matrix	430 0458 0	–	5.6 mm	2.5 mm	4,1 mm	–
Locking pin matrix, mini	430 0490 0	–	4.6 mm	1.9 mm	3.6 mm	–
Locking pin patrix	430 0458 0	–	5,4 mm	3.7/1.2 mm	3.4 mm	–
Locking pin patrix, mini	430 0490 0	–	4.3 mm	3.7/0.9 mm	2.8 mm	–

IMPLANT PROSTHETICS

ONE-STOP INTERDISCIPLINARY COMPETENCE – WHAT THE BREDENT GROUP STANDS FOR



As long ago as 1974 and with the prime intention of ensuring the long-lasting success of its products when used by customers, the bredent group set out to do more than simply manufacturing a series of stand-alone products.

By providing a comprehensive range of products, system solutions and treatment concepts for dental technology and dentistry that can be combined in a professionally competent manner, the bredent group is amongst the few companies that are held in equally high esteem by customers and professionals alike.

In close cooperation with reference laboratories and practices, well-matched, patient-centred products, system solutions and treatment concepts are developed, which can be implemented efficiently and rapidly in the laboratory and the practice.

The positive effect of ground-breaking development!

Screw connections

Using innovative screwing, bredent facilitates the simple manufacture of removable dental prostheses. Secure hold due to screws that cannot be loosened individually achieves a high degree of security.

Indications
- Screwing or fixation
- Implant suprastructures
- Individual solutions possible

Product variations
- Security-Lock-System – three different processing options
- Friction Splint FS1 – the threadless fixation
- Bridge-sectioning attachment – diagonal or transverse screwing
- Toolkit for individual screws – endless possibilities
- Transverse fixation and assembled transverse fixation

Properties
- Time-saving and secure processing
- Cost-effective solution with a high level of individuality

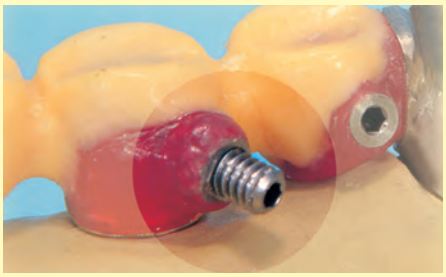
Materials
The screws are manufactured from biocompatible titanium.



Bridge-sectioning attachment – diagonal or transverse screwing



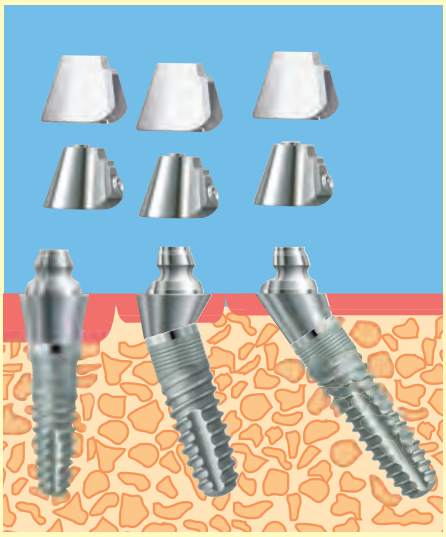
Toolkit for individual screws – endless possibilities



Security-Lock-System – three different processing options



Friction Splint FS1 – the threadless fixation



Transverse fixation and assembled transverse fixation

Universal screwdriver set



Sterilizable set

Screwdriver set for 98% of all screws available on the market. To be inserted into the torque ratchet, adjustable from 10 to 40 Ncm. This way screws can be turned in correctly and safely.



Universal screwdriver set to loosen and tighten all types of screwed implant abutments.

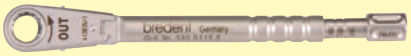
Universal screwdriver set with instruments
REF 310 0001 2

Universal screwdriver set, without instruments
REF 310 0001 1





On the lid you can find important information required for the quick selection of the necessary screwdriver and the torque needed to tighten the screw.



Torque ratchet
REF 330 0115 5

Torque adjustable from 10 to 40 Ncm.



Screwdriver long

6	Screwdriver	1	Torx 6	**REF 310 0010 1**
	Screwdriver	2	slotted 1.6	**REF 310 0010 2**
	Screwdriver	3	slotted 2	**REF 310 0010 3**
	Screwdriver	4	0.03" only available as short type	
0.05"	Screwdriver	5	Allen 0.05"	**REF 310 0010 5**
0.9	Screwdriver	6	Allen 0.9	**REF 310 0010 6**
1	Screwdriver	7	Allen 1.0	**REF 310 0010 7**
1.2	Screwdriver	8	Allen 1.2	**REF 310 0010 8**
1.8	Screwdriver	9	Allen 1.8	**REF 310 0010 9**
2.5	Screwdriver	10	Hexagon 2.5	**REF 310 0011 0**
1.3	Screwdriver	11	Square 1.3	**REF 310 0101 1**
5.5	Screwdriver	12	Torx 5.5	**REF 310 0101 2**



Screwdriver short

6	Screwdriver	1	short	Torx 6	**REF 310 00K0 1**
	Screwdriver	2	short	slotted 1.6	**REF 310 00K0 2**
	Screwdriver	3	short	slotted 2	**REF 310 00K0 3**
0.03"	Screwdriver	4	short	Allen 0.03"	**REF 310 00K0 4**
0.05"	Screwdriver	5	short	Allen 0.05"	**REF 310 00K0 5**
0.9	Screwdriver	6	short	Allen 0.9	**REF 310 00K0 6**
1	Screwdriver	7	short	Allen 1.0	**REF 310 00K0 7**
1.2	Screwdriver	8	short	Allen 1.2	**REF 310 00K0 8**
1.8	Screwdriver	9	short	Allen 1.8	**REF 310 00K0 9**
	Screwdriver	10		Allen 2.5 only available as long type	
1.3	Screwdriver	11	short	Square 1.3	**REF 310 00K1 1**
5.5	Screwdriver	12	short	Torx 5.5	**REF 310 00K1 2**

Universal screwdriver set for contra-angles



Sterilizable set

Screwdrivers with seating for contra-angles. Thanks to the integrated torque they simplify turning in screws with special motors. In conjunction with the adapter, the screwdrivers can also be used with the torque ratchet.



Universal Screwdriver-Set for contra-angles, with instruments REF 310 W001 2

Universal Screwdriver-Set for contra-angles, without instruments REF 310 W001 1

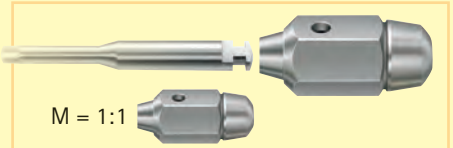


Accessories:



Torque ratchet REF 330 0115 5

Torque adjustable from 10 to 40 Ncm.



Ratchet adapter REF 580 0116 8



Screwdriver long

6	Screwdriver	1	Torx 6	**REF 310 W010 1**
	Screwdriver	2	slotted 1.6	**REF 310 W010 2**
	Screwdriver	3	slotted 2	**REF 310 W010 3**
	Screwdriver	4	0.03" only available as short type	
0.05"	Screwdriver	5	Allen 0.05"	**REF 310 W010 5**
0.9	Screwdriver	6	Allen 0.9	**REF 310 W010 6**
1	Screwdriver	7	Allen 1.0	**REF 310 W010 7**
1.2	Screwdriver	8	Allen 1.2	**REF 310 W010 8**
1.8	Screwdriver	9	Allen 1.8	**REF 310 W010 9**
2.5	Screwdriver	10	Hexagon 2.5	**REF 310 W011 0**
1.3	Screwdriver	11	Square 1.3	**REF 310 W101 1**
5.5	Screwdriver	12	Torx 5.5	**REF 310 W101 2**



Screwdriver short

6	Screwdriver	1	short	Torx 6	**REF 310 W0K0 1**
	Screwdriver	2	short	slotted 1.6	**REF 310 W0K0 2**
	Screwdriver	3	short	slotted 2	**REF 310 W0K0 3**
0.03"	Screwdriver	4	short	Allen 0.03"	**REF 310 W0K0 4**
0.05"	Screwdriver	5	short	Allen 0.05"	**REF 310 W0K0 5**
0.9	Screwdriver	6	short	Allen 0.9	**REF 310 W0K0 6**
1	Screwdriver	7	short	Allen 1.0	**REF 310 W0K0 7**
1.2	Screwdriver	8	short	Allen 1.2	**REF 310 W0K0 8**
1.8	Screwdriver	9	short	Allen 1.8	**REF 310 W0K0 9**
	Screwdriver	10		Allen 2.5 only available as long type	
1.3	Screwdriver	11	short	Square 1.3	**REF 310 W0K1 1**
5.5	Screwdriver	12	short	Torx 5.5	**REF 310 W0K1 2**

Screwdriver long



Screwdriver long
1 piece
REF 330 0081 2

The long screwdriver allows perfect visual control of the horizontal path of screwing in the laboratory. The screw connection can be more easily achieved by the dentist. For screws with 0.9 mm hexagon socket.

Screwdriver short



Screwdriver short
1 piece
REF 330 0069 0

Ideal for practice and laboratory. The grooved handle simplifies turning in of screws since safe hold is ensured. For screws with 0.9 mm hexagon socket.

Screwdriver for contra-angles



Screwdriver for contra-angles
1 piece
REF 330 0081 3

For mechanical turning in of screws with 0.9 mm hexagon socket. The use of special motors allows to control the torque.

Screwdriver-Set



Assortment

3 pieces
1 x Screwdriver long
1 x Screwdriver short
1 x Screwdriver for contra-angles
REF 330 0081 0

Screwdriver is



Screwdriver is
for contra-angles
1 piece
REF 460 0001 0



Screwdriver is
manual short
1 piece
REF 460 0001 1

Special screwdrivers for the vks-oc rs abutments. Suitable as manual screwdriver and for contra-angles for enhanced control of the torque with special motors.

Screwdriver for stud-head screw



Screwdriver for stud-head screw
1 piece
REF 330 0116 4

Screwdriver for the stud-head screw vks-oc/sg 1.7 exchangeable stud.

Milling and drilling oil



Milling/drilling oil
20 ml
REF 550 0000 8

Especially developed for the milling and drilling technique.
This milling and drilling oil does not contain any ethereal additives. Accordingly, the evaporation temperature is increased considerably; gumming of the oil is no longer possible. Due to special components and the particular consistency, the oil film remains between the metal and the milling tool. This results in the fact that metal chips come out of the cutting sections of the burs more quickly and thus easier milling is possible. The cutting performance and the service life of the milling tools is enhanced correspondingly. By using this milling and drilling oil, more material can be removed while exerting less pressure and obtaining a considerably smoother surface. The oil that has been especially developed for dental techniques withdraws the heat during processing of the object more quickly and avoids overheating of the milling and drilling tools.



When tapping, always use a rich quantity of milling and drilling oil. This simplifies turning in of the tap.



The surface of the object becomes clearly smoother if the oil is used.



This milling and drilling oil avoids overheating of the milling and drilling tools; consequently, the service life of the milling tools is increased considerably.

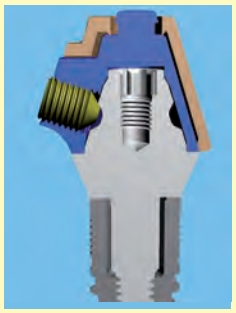
Use:
Always use a rich quantity of milling and drilling oil during centring, drilling, milling and tapping.

Transverse fixation



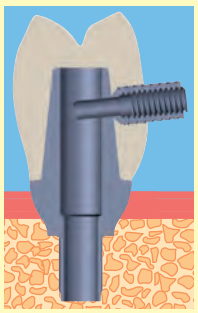
In angled implants, diagonal screwing often means that the screw channel is on the surface of the crown, which also cannot always be compensated for using appropriate angled abutments. Aesthetic problems can therefore occur. In the area of the lateral teeth, the opening of the screw channel can lead to problems with diagonal load distribution.



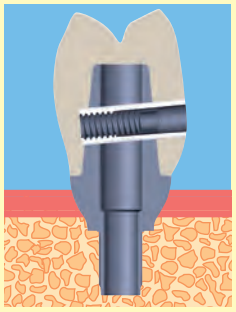


The solution for this is transverse fixation. The bredent group offers various systems for this:

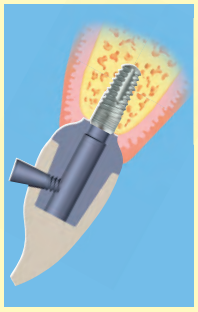
- Assembled transverse screwing to the SKY system
- Individual transverse fixation, suitable for all implant systems



Security-Lock - the screw sits in the secondary part and the prosthetic restoration is bolted in the abutment



Friction Splint – fixation of the prosthetic restoration without a threaded hole

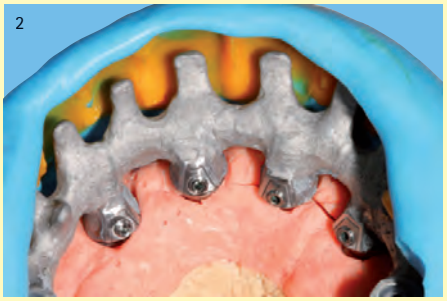


Individual screwing – conical titanium screw with the corresponding toolkit

Clinical case

Final restoration with milled NPM framework and veneered with the visio.lign system. 4 implants screwed transversally and 2 implants screwed occlusally. (Stefan Adler, Dental Technician, Landsberg)



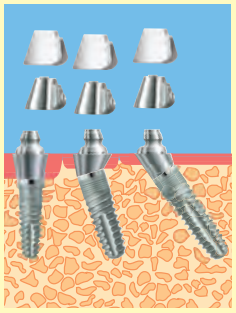




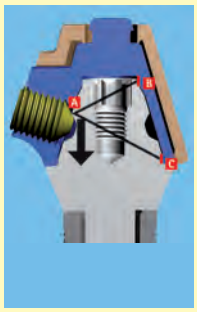




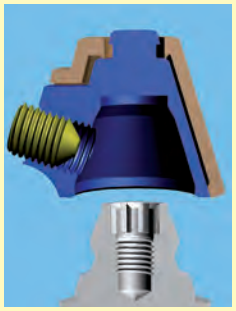
Assembled transverse fixation



For the straight and angled abutments of the SKY fast & fixed system, large and small bridges can be manufactured to a high aesthetic level with prosthetic caps for transverse screwing, as no screw channels impede the aesthetics.
All framework materials can be used with this type of screwing - titanium, gold, NPM, ceramic, BioHPP. The "passive fit" of the bridge construction is ensured by oral bonding.



A highly secure and sealed connection is created using three-point fixation and the contact pressure generated by tight screwing of the prosthetic caps into the abutment platform.

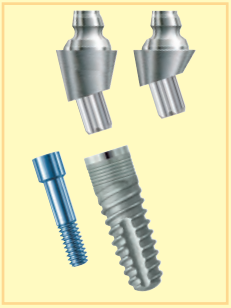


The simplicity of use, particularly in the patient's mouth is ensured thanks to the variability of the screw position (360° in the case of straight abutments and 270° in the case of angled abutments), as access to the screw can always be positioned in an optimum manner. Moreover, the screw remains in the bridge so that protracted and difficult threading in the mouth is avoided. Transverse fixation can also be combined simply with diagonal screwing.

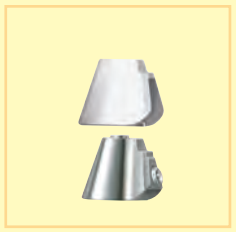




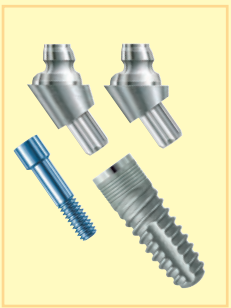
SKY fast & fixed
Abutment 0°
with integrated screw
Height 1 mm
REF SKYFT001
Height 2 mm
REF SKYFT002
Height 4 mm
REF SKYFT004



SKY fast & fixed
Abutment 17,5°
with screw 2,2
Height 3 mm
REF SKYFT173
Height 5 mm
REF SKYFT175

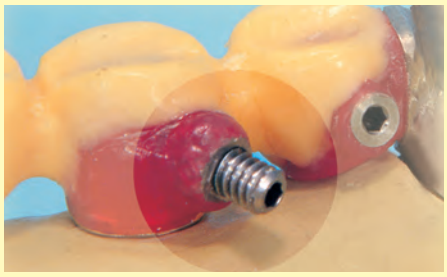


SKY fast & fixed
Prosthetic coping
Transversal screw-retained
REF SKYFTPKS

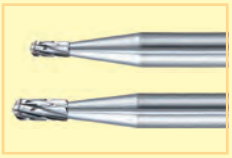


SKY fast & fixed
Abutment 35°
with screw 2,2
Height 4 mm
REF SKYFT354
Height 5 mm
REF SKYFT355

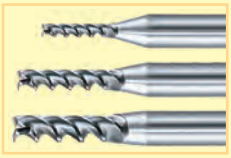
Security-Lock



Patented threaded units which do not loosen or break. As the non-threaded section is in the inner coping, no micro-movements can be transferred. This guarantees that the threaded rod will not loosen inadvertently.
The matrix sleeve made of a high-melting cast-on alloy can be cast on up to max. 1300 °C.
The threaded rods are available in three different sizes (1.0/1.4 and 1.8 mm) and suitable for any situation.



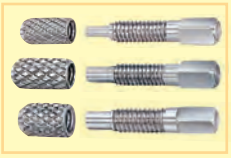
HM-Centring drill
1.0
REF 330 0081 5
1.4
REF 330 0066 0



Diatit-Multidrill
1.0
REF 330 0061 0
1.4
REF 330 0079 0
1.8
REF 330 0080 0



Threaded rods
2 pieces
1.0
REF 430 0729 3
1.4
REF 430 0729 4
1.8
REF 430 0729 5



Matrix sleeve with fixing screw
2 pieces each
1.0
REF 430 0729 6
1.4
REF 430 0729 7
1.8
REF 430 0729 8

Accessories:



Screwdriver short
1 piece
REF 330 0069 0

Additional screwdrivers see pages 216–218.



Milling/drilling oil
20 ml, see page 219
REF 550 0000 8

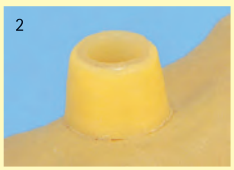
Assortment
9 pieces
Security-Lock 1.0
2 Threaded rods
2 Matrix sleeves
2 Fixing screws
1 Diatit-Multidrill
1 HM-Centring drill
1 Screwdriver short
REF 430 0729 0

Assortment
9 pieces
Security-Lock 1.4
2 Threaded rods
2 Matrix sleeves
2 Fixing screws
1 Diatit-Multidrill
1 HM-Centring drill
1 Screwdriver short
REF 430 0729 1

Assortment
9 pieces
Security-Lock 1.8
2 Threaded rods
2 Matrix sleeves
2 Fixing screws
1 Diatit-Multidrill
1 HM-Centring drill
1 Screwdriver short
REF 430 0729 2



The different sizes can be used for a wide range of applications with implants and bridges etc.



In this case, a superstructure is to be retained with a screw. The abutment should be waxed up using standard procedures.



Once the abutment has been cast, it should be milled and polished.



A centring drill is used to create a purchase point in the correct position.



The correct size of Multidrill is used to drill a hole at the correct angle for the threaded rod. It is absolutely essential that bredent milling/drilling oil is used.



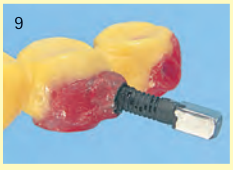
Screw the threaded rod into the threaded sleeve. Both the pin and hexagonal socket (max. reduction: 2.3 mm) can be reduced as required.



Coat the threaded rod and sleeve with Pi-Ku-Plast, REF 540 0017 6.



Pi-Ku-Plast garantees optimum strength for continued processing.



Screw a retention screw coated with colloidal graphite into the threaded sleeve to retain it in the investment material, REF 540 0070 6.

Dimensions





Product	REF	Ø	Length	Thread	Length/Rod	max. Reduction
Threaded rod titanium 1.0	430 0729 3	Rod 1.0 mm	8.5 mm	M 2 x 0.4	3.5 mm	2.3 mm
Threaded rod titanium 1.4	430 0729 4	Rod 1.4 mm	8.5 mm	M 2 x 0.4	Rod 3.5 mm	2.3 mm
Threaded rod titanium 1.8	430 0729 5	Rod 1.8 mm	8.5 mm	M 2.5 x 0.45	Rod 3.5 mm	2.3 mm
Matrix sleeve HL 1.0	430 0729 6	2.8 mm	5.3 mm	–	–	2.3 mm
Matrix sleeve HL 1.4	430 0729 7	2.8 mm	5.3 mm	–	–	2.3 mm
Matrix sleeve HL 1.8	430 0729 8	3.2 mm	5.3 mm	–	–	2.3 mm

Security-Lock-Ceramic



Security-Lock-Ceramic 1.4 allows splinting for all alloys without a thread sleeve.

Restorations made of a CoCr alloy which are to be veneered are biocompatible and can be produced without any additional alloy components.



Auxiliary modelling element 1.4
REF 360 0116 9



Ceramic screws with wax sleeve1.4
2 pieces
REF 360 0117 0



HM-Centring drill 1.4
REF 330 0066 0



Diatit-Multidrill
1.4 x 6 mm
REF 330 0079 0



Threaded rods 1.4
2 pieces
REF 430 0729 4



First tap, tungsten carbide
REF 460 0010 M



Second tap, tungsten carbide
REF 460 0010 F



Tap handwheel
REF 330 0115 3



Ceramic removing tool
REF 460 0010 6

Assortment

10 pieces, 1 piece each
Auxiliary modelling element
Ceramic screw with wax sleeve
HM-Centring drill
Diatit-Multidrill
Threaded rod 1.4
First tap, tungsten carbide
Second tap, tungsten carbide
Ceramic removing tool
Tap handwheel
Screwdriver, short

REF 430 0739 1

Accessories:



Screwdriver short
1 piece
REF 330 0069 0



Milling/drilling oil
see page 219
REF 550 0000 8



The wax model of the primary constractions is prepared in the usual way.



Any alloy can be used for casting, even CoCr alloys.



After parallel milling, the secondary element is moulded using Pi-Ku-Plast.



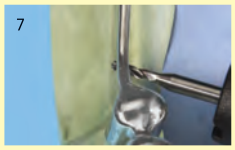
To determine the exact position of the screw, the wax-up is modelled according to the situation.



The wax is removed at the specific point to determine the exact drilling position.



A groove is prepared at this point using the tungsten carbide centering drill.



The Diatit-Multidrill 1.4 and milling and drilling oil are used to prepare a hole in the desired direction of screwing.



The auxiliary modelling element is attached to the model using Pi-Ku-Plast and reduced with wax according to the situation.



The wax-up is reduced for ceramic veneering according to the situation.



Using tweezers, the auxiliary modelling element is turned slightly and removed.



After attaching the sprues, the ceramic spacer with wax sleeve is inserted into the opening up to the stop.



The wax sleeve and the model are connected.



The ceramic spacer remains in the metal structure until the ceramic veneer is completed.



The ceramic spacer is removed with the ceramic removing tool - do not remove with the sandblaster.



The thread is recut using the first and the second tap. Use milling and drilling oil when tapping.



The threaded rod is turned in and primary and secondary element are screwed with each other.



The threaded rod is shortened to the required length (max. reduction: 2.3 mm) using the Tita-Pol prepolishing wheel.



Security-Lock-Ceramic 1.4 can be processed safely and quickly with just a single alloy. There are no temperature-related alloy problems since finished parts are cast in.

Dimensions



Product	REF	Ø	Length	Thread	Length/Rod	max. Reduction
Threaded rod titanium 1.4	430 0729 4	Rod 1.4 mm	8.5 mm	M 2 x 0.4	Rod 3.5 mm	2.3 mm

Security-Lock adhesive sleeve



Security-Lock system is perfectly suitable for situations difficult to access such as small jaws or large-span bridges. The titanium threaded sleeve that can be glued in allows processing independent of the alloy.



Auxiliary modelling element 1.4
REF 360 0116 9



HM-Centring drill 1.4 mm
REF 330 0066 0



Diatit-Multidrill
1.4 x 6 mm
REF 330 0079 0



Threaded rods 1.4
2 pieces
REF 430 0729 4



Matrix sleeves titanium, 2 pieces
REF 430 0739 7



Tap handwheel
REF 330 0115 3

Assortment

5 pieces, 1 piece each
Auxiliary modelling element 1.4
HM-Centring drill 1.4
Diatit-Multidrill
Threaded rod 1.4
Matrix sleeve titanium

REF 430 0739 5

Accessories:



Screwdriver short
1 piece
REF 330 0069 0

Additional screwdrivers see pages 216–218.



FGP insulating agent
REF 540 0102 7



Milling/drilling oil
see page 219
REF 550 0000 8



DTK-adhesive
REF 540 0010 6

Dimensions





Product	REF	Ø	Length	Thread	Length/Rod	max. reduction
Threaded rod titanium 1.0	430 0729 3	Rod 1.0 mm	8.5 mm	M 2 x 0.4	3.5 mm	2.3 mm
Threaded rod titanium 1.4	430 0729 4	Rod 1.4 mm	8.5 mm	M 2 x 0.4	Rod 3.5 mm	2.3 mm
Threaded rod titanium 1.8	430 0729 5	Rod 1.8 mm	8.5 mm	M 2.5 x 0.45	Rod 3.5 mm	2.3 mm
Matrix sleeve titanium 1.4	430 0739 7	2.8 mm	5.3 mm	–	–	2.3 mm
Matrix sleeve HL 1.0	430 0729 6	2.8 mm	5.3 mm	–	–	2.3 mm
Matrix sleeve HL 1.4	430 0729 7	2.8 mm	5.3 mm	–	–	2.3 mm
Matrix sleeve HL 1.8	430 0729 8	3.2 mm	5.3 mm	–	–	2.3 mm

bredent group

Security-Lock adhesive sleeve


1

Any alloy is suitable for casting, even CoCr alloys.


2

After parallel milling and high luster polishing, the secondary element is moulded with Pi-Ku-Plast.


3

To determine the exact position of the screw, the wax up is modelled according to the situation.


4

The wax is removed at the specific point to determine the exact drilling position.


5

A groove is prepared at this point using the tungsten carbide centering drill 1.4.


6

The Diatit-Multidrill 1.4 and milling and drill oil are used to prepare a hole in the desired direction of screwing.


7

The auxiliary modelling element is attached to the model using Pi-Ku-Plast and moulded (completed) with wax according to the situation.


8

Prior to investing, the auxiliary modelling element is removed by turning it slightly with a pair of tweezers.


9

Any alloy can be used for casting the secondary construction.


10

All elements that must not be glued – such as the primary construction, the external surfaces of the primary construction and the screw are ...


11

... separated with FGP insulating liquid (REF 540 0102 7) so that the excessive adhesive can be removed easily.


12

After separating, the threaded rod is turned into the matrix sleeve.


13

Primary and secondary element are assembled. A drop of DTK adhesive is filled and spread evenly in the hole in the secondary element.


14

Matrix sleeve and threaded rod are inserted into the hole and no longer moved until the DTK adhesive has hardened.


15

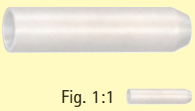
The protruding matrix sleeve and the threaded rod are cut off to obtain the required length (max. reduction: 2.3 mm) using the Tita-Pol prepolishing wheel.


16

Ideal for processing high-melting alloys or titanium in very narrow jaws. The Security-Lock-adhesive sleeve ensures simple and quick processing.

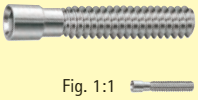
Friction Splint FS1

Connecting elements for superstructures.
- **uncomplicated integration in the mouth**
- **defective screw connectors can be repaired with FS1**
- **FS1 is replaceable**
- **time-saving, no tapping necessary**
- **variable application for all indications**
- **can be individually shortened**
- **no loosening through expansion**



Friction Splint FS1 sleeve
1 piece
REF 450 0008 0

10 pieces
REF 450 0008 4



Friction Splint FS1 pin
1 piece
REF 450 0008 1

10 pieces
REF 450 0008 5



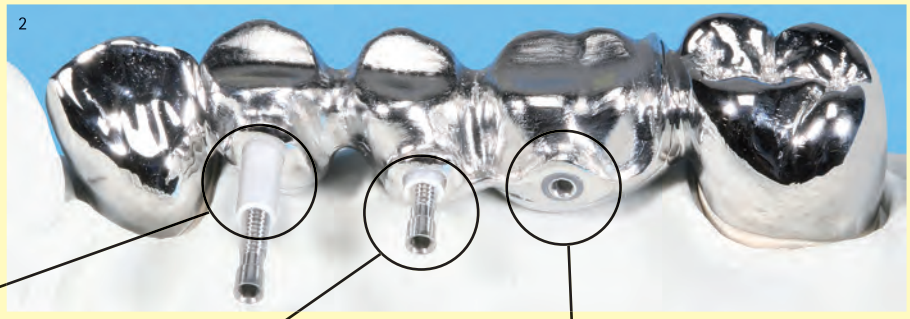
Modeling aid
Ø 2,0 mm
1 piece
REF 450 0008 3

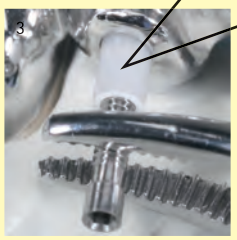
10 pieces
REF 450 0008 7

Spacer
Ø 2,0 mm
1 piece
REF 450 0008 2

10 pieces
REF 450 0008 6



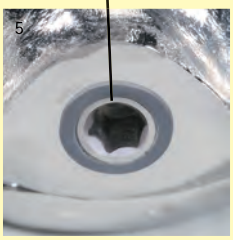




The FS1 sleeve is pushed into the congruent splint hole running through the primary and secondary part with the pre-assembled splint screw.



The FS1 sleeve is pushed into the congruent splint hole running through the primary and secondary part with the pre-assembled splint screw.



...the splint screw is screwed in.



No tapping is necessary.



Damaged screw connectors....



.....can be re-tooled with the FS1.

Accessories:



Diatit-Multidrill
Ø 2,0
1 piece
REF 330 0072 0



Fixing screw
2 pieces
REF 360 0103 0



Screwdriver short
1 piece
REF 330 0069 0



Milling/drilling oil
see page 219
REF 550 0000 8

Additional screwdrivers see pages 216-218.

Friction Splint FS1



Wax-up with matrix.



Remove the wax-up. The pin hole is drilled into the abutment with the Dia-tit-Multidrill Ø 2,0 mm.



The wax-up is placed back onto the model. The modeling aid is integrated in the wax-up. Holes with a diameter of 2.0 mm are drilled into the full wax-up at the positions for the attachments.



The attachments are milled. The previously prepared matrix serves for orientation. The ceramic spacer can be used to ensure perfect casting of the splint holes.



Using the modeling aids...



... the secondary units are waxed up and prepared for casting.



Sleeve...



...and splint screw are shortened to the same length if required.



In the case of zirconium crowns it must be ensured that ...



...the diameter of the drillhole is 2.0 mm after the sintering process and ...



...the ceramic firings. Stress/tension within the ceramic can only be avoided in this way.



The splint screw which is screwed half way into the sleeve is positioned using tweezers...



...and pressed in. The remaining section of the splint screw is turned in.



The splint can be removed by turning it out with the screwdriver SW 0,9.



The screwed-in fixing screw is removed from the sleeve.



In case of usage of less than 1 year and in undamaged condition, the removed sleeve can be reinserted.

Tool set for individual screw connections 1.4 and 1.6

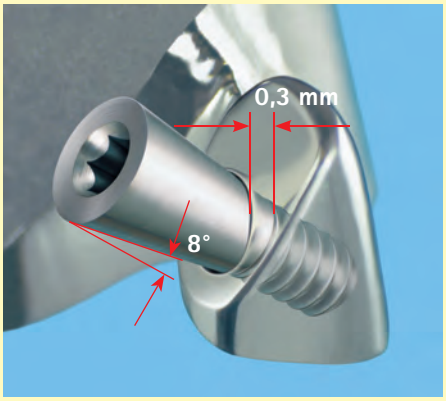


For any situations and possibilities of dental technical screw connections.

Fast, inexpensive and tension-free screw connections.



Perfectly suitable for two-section bridges and dentures that are removeable to a limited degree.



The screw head is lowered 0.3 mm deep into the primary element. This way maximum tensile strength and protection against acting shear stress are ensured.
The conical screw head provides a self-locking effect. It is not possible for the screw to loosen itself.

Individual screw connections must be prepared for all gold content alloys at the points dictated by the dental-technical conditions. This way new dental-technical indications are obtained.

Available in two different thread sizes.

Assortment



10 pieces
Tool set for individual screw connections M 1.4
REF 330 0060 0

Assortment



10 pieces
Tool set for individual screw connections M 1.6
REF 330 0001 6



HM-Centring drill Ø 1.4
1 piece
for M 1.4 and M 1.6
REF 330 0066 0



First tap
1 piece each
M 1.4
REF 330 0067 1
M 1.6
REF 330 0116 V

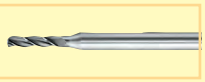


Titanium screw
1 piece
M 1.4 x 0.3
REF 330 0070 0
Head length 2.5 mm

10 pieces
M 1.4 x 0.3
REF 330 0071 0

1 piece
M 1.6 x 0.35
REF 330 0116 0
Head length 2.5 mm

10 pieces
M 1.6 x 0.35
REF 330 0116 1



Diatit-Multidrill
1 piece each
M 1.4
REF 330 0063 0
M 1.6
REF 330 0115 7



Second tap
1 piece each
M 1.4
REF 330 0067 0
M 1.6
REF 330 0116 F



Diatit-Multidrill with stop
1 piece each
M 1.4
REF 330 0075 0
M 1.6
REF 330 0115 8



Auxiliary modelling element
1 piece each
M 1.4
REF 330 0115 6
M 1.6
REF 330 0116 3



Titanium screw extended head
1 piece
M 1.4 x 0.3
REF 330 0K70 0
Head length 3.5 mm

10 pieces each
M 1.4 x 0.3
REF 330 0K71 0

1 piece
M 1.6 x 0.35
REF 330 K116 0
Head length 3.5 mm

10 pieces
M 1.6 x 0.35
REF 330 K116 1
Head length 3.5 mm



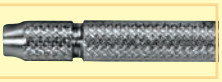
Facing cutter
1 piece each
M 1.4
REF 330 0065 0
M 1.6
REF 330 0115 9



Screwdriver short
1 piece
REF 330 0069 0

Additional screwdrivers see pages 216-218.

Accessories: :



Tap holder
1 piece
REF 330 0068 0

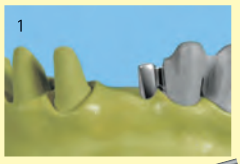


Milling/drilling oil
see page 219
REF 550 0000 8

Tool set for individual screw connections 1.4 and 1.6

Two possibilities for a successfull screw connection

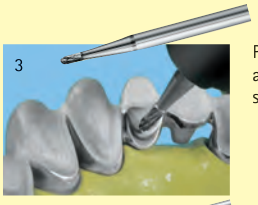
The quick screw connection without milling machine, only with the handpiece


1

The patrix of the bridge-sectioning attachment features the same direction of insertion as residual abutment teeth.


2

Wax-up the second bridge element, cast and finish.


3

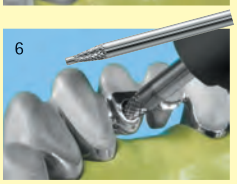
Prepare a small groove at the point where the screw is to be placed.


4

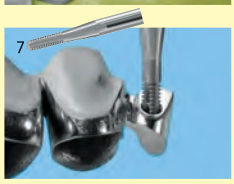
Drill through the secondary element approx. 1.5 mm deep into the primary element using the Diatit-Multidrill.


5

Remove the secondary element and drill into the primary element up to the stop using the Diatit-Multidrill with stop.


6

Assemble the primary and secondary element and drill up to the stop using the tungsten carbide facing cutter.


7

Cut the thread into the primary element. First use the first tap and then the last tap.


8

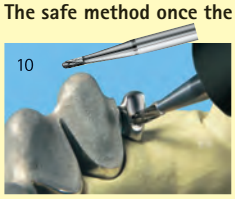
Assemble primary and secondary element and turn into the screw.


9

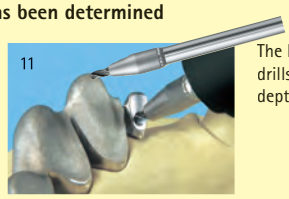
The screw head with the secondary element is ground flush and polished.

Use of the auxiliary modelling element

The safe method once the direction of the screw has been determined


10

Grind a small groove into the patrix using the center drill.


11

The Diatit-Multidrill drills down to the exapt depth.


12

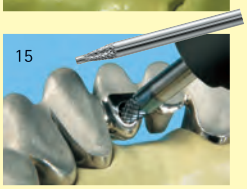
Integrate the auxiliary modelling element into the pattern using the brush resin.


13

Complete the pattern using modelling wax.


14

Turn the auxiliary modelling element with apair of pliers and remove it.


15

After casting, assemble the bridge elements. Drill to the stop using the facing cutter. Further working steps are described in figures 7, 8 and 9.

Dimensions





Product	REF	Ø	Length	Thread	Length/Head	max. Reduction
Titanium screw M 1.4	330 0070 0	2.1 mm	4.5 mm	M 1.4 x 0.3	2.5 mm	1.2 mm
Titanium screw M 1.4 / 3.5	330 0K70 0	2.3 mm	5.5 mm	M 1.4 x 0.3	3.5 mm	1.8 mm
Titanium screw M 1.6	330 0116 0	2.3 mm	5.2 mm	M 1.6 x 0.35	2.5 mm	1.2 mm
Titanium screw M 1.6 / 3.5	330 K116 0	2.6 mm	6.2 mm	M 1.6 x 0.35	3.5 mm	2.0 mm

Tool set for individual screw connections Additional Set zirconium



Assortment

3 pieces, 1 piece each
Diatit-Multidrill
Facing cutter zirconium
Positioning pin

REF 330 2432 4

The preparation of screw connections in zirconium restorations is simplified in conjunction with the tool set for individual screw connections 1.4.



The tools that are 30 % larger compensate the shrinkage of zirconium and allow precision-fit screw connections.



Diatit-Multidrill
1.5 x 8 mm
REF 330 0073 0



Facing cutter zirconium
REF 330 2432 6



Positioning pin
REF 330 2432 7

Bridge-sectioning Attachment oc



This prefabricated unit facilitates fabrication of a sectioned bridge with occlusal screw.

The titanium screw has a hexagonal socket to facilitate tightening and loosening it.

The circumferential ring marks the maximum level to which it can be shortened.

Made of cast-on alloy.



Titanium screw
1 piece
REF 330 0070 0
10 pieces
REF 330 0071 0



Closing ring HL, cast-on
2 pieces
REF 430 0730 4



Fixation screw
2 pieces
REF 360 0103 0



Bridge-sectioning studs oc
2 pieces
REF 430 0730 3

Assortment

6 pieces, 1 piece each
Titanium screw
Closing ring HL, cast-on
Bridge sectioning studs oc
Fixation screw
Paralleling mandrel
Screwdriver short
REF 430 0730 2

Accessories:



Screwdriver short
1 piece
REF 330 0069 0

Additional screwdrivers see pages 216–218.



Paralleling mandrel
for oc and custom bridge-sectioning attachments
1 piece
REF 360 0115 7



The paralleling mandrel positions the sectioning attachment correctly.



The design and minimal dimensions of the threaded sleeve in the sectioning attachment enable it to be adapted to the papillae as required.



The threaded sleeve is made of a cast-on alloy and can be used with any gold or semi-precious alloy.



The fixing screw which is coated with colloidal graphite retains the threaded sleeve precisely in the investment material.



The section connecting the attachment to the coping is rounded, has a diameter of 1.0 mm* and can be trimmed accurately with a 1.0 mm rotary cutter if required.



The circumferential ledge on the locking ring marks the level to which the screw and locking ring can be reduced.



To ensure that the locking ring is fixed in place securely, the outer section must be moulded with Pi-Ku-Plast brush-on resin.



The exterior design of the locking ring, which consists of a cast-on gold alloy, ensures that it is retained securely in resin.



The bridge pattern is waxed up onto the resin outer section.



The titanium screw can be ground to blend it into the occlusal surface.

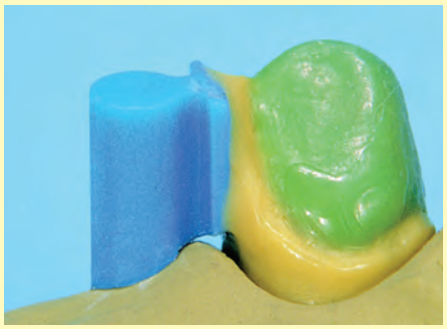
Dimensions



Product	REF	Ø	Length	Thread	Length/Head	max. Reduction
Titanium screw 1.4	330 0070 0	2.1 mm	4.5 mm	M 1.4 x 0.3	2.5 mm	1.4 mm
Closing ring HL, cast-on HL	430 0730 4	2.5 mm	2.1 mm	–	–	1.4 mm
Bridge-sectioning studs oc	430 0730 3	3.0 mm	6.9 mm	M 1.4 x 0.3	–	3.3 mm

bredent group

Custom Bridge-sectioning Attachment



Reliable processing with the complete set of tools simplifies the fabrication of all types of bridge-sectioning attachments.



Custom bridge-sectioning attachments
8 pieces
REF 430 0735 0

Accessories:



Tool set
10 pieces
REF 330 0060 0



Paralleling mandrel
for oc and custom bridge-sectioning attachments
1 piece
REF 360 0115 7



Milling/drilling oil
see page 219
REF 550 0000 8



1 A paralleling mandrel is used to position the bridge-sectioning attachment as required for the case.



2 The plastic component can be adapted to the papillae as required.



3 The section connecting the attachment to the coping is rounded, has a diameter of 1.0 mm* and can be trimmed with a cylindrical cutter (size 010) if required.



4 The purchase point is created with a centring drill.



5 Bredent milling/drilling oil should be used when drilling. All other oils, especially etheric oils, are unsuitable and impede correct drilling.



6 A Multidrill (1.2 x 5) from the tool set is used to drill an approximately 2 mm deep hole. The use of generous amounts of drilling oil prevents the drill overheating.



7 Use a stop drill (1.2 x 2) to drill the threaded hole precisely to the required depth. Use Bredent drilling oil to ensure that the hole is drilled neatly and smoothly.



8 A countersinking drill is used to widen the hole to 1.4 mm for the thread tap and create space for the conical screw head.



9 The pre-tap taps the first stage of the thread. The final tap taps a high precision thread. Drilling oil prevents the tap jamming.



10 The conical screwhead fits into the inner section by approximately 3/10 mm. It withstands higher shear forces (155 kg) than conventional systems.



11 The screw should be coated with Pi-Ku-Plast resin and integrated into the pattern. The screw should be reduced after casting.



12 The minimal dimensions of the screw provide pleasant aesthetics for all screw-retained restorations.

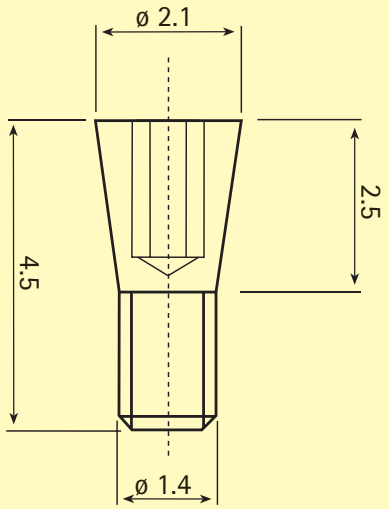
Dimensions



Product	REF	Ø	Length	Thread	Length/Rod Head length	max. Reduction
Custom Bridge-sectioning Attachment	430 0735 0	3.0 mm	7.0 mm	–	–	custom

Prefabricated screwing set

For occlusal and horizontal screw connections.



Titanium screw
M 1.4 x 0.3




Fig. 1:1

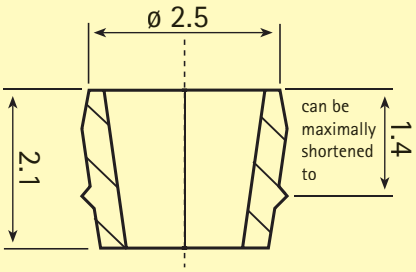
Titanium screw
1 piece
REF 330 0070 0
10 pieces
REF 330 0071 0


Fig. 1:1

Closing ring HL, cast-on
2 pieces
REF 430 0730 4



Tapped bush HL
2 piece
REF 330 0081 1



Closing ring HL, cast-on

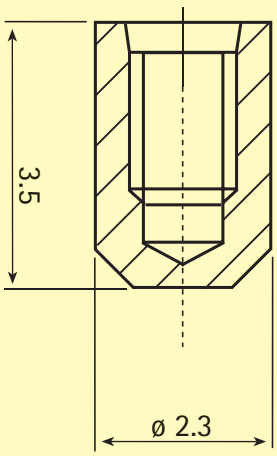




Fixation screw
2 pieces
REF 360 0103 0



Screwdriver short
1 piece
REF 330 0069 0
Additional screwdrivers see pages 216–218.



Tapped bush HL



Assortment

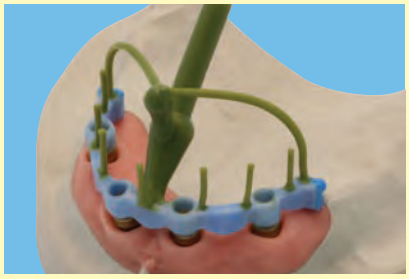
5 pieces, 1 piece each
Titanium screw
Closing ring HL, cast-on
Tapped bush HL
Fixation screw M 1.4
Screwdriver short
REF 430 0735 1

Dimensions



Product	REF	Ø	Length	Thread	Length/Head	max. Reduction
Titanium screw 1.4	330 0070 0	2.1 mm	4.5 mm	M 1.4 x 0.3	2.5 mm	1.4 mm
Closing ring HL, cast-on HL	430 0730 4	2.5 mm	2.1 mm	–	–	1.4 mm
Tapped bush HL	330 0081 1	2.3 mm	3.5 mm	–	–	–

Harmonized products in the casting technique system offer unsurpassed precision for high-quality dental restorations, which is ensured and can be reproduced at any time through the use of products for the casting technique developed and manufactured by bredent.



The primary structure is fabricated as described in chapter 5. Brevest C+B Speed is used to ensure accurate fit of the restoration.



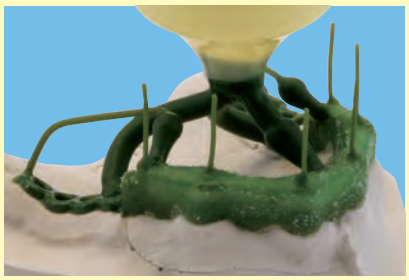
The block-out and saddle waxes feature exceptional modelling properties for accurate exposure. This way the time required for fitting the secondary structure is reduced.



The duplicating system with the duplicating silicone is an essential component of the system. Accurate duplicating is the key to precision of fit of the CoCr structure.



The investment materials that can be exactly controlled reduce the amount of time for fitting and contribute to fabricating precision-fit castings.



The system of sprues ensures of homogeneous structure of the casting and hence a compatible substructure. Additionally, the dense surface facilitiates polishing.



Surfaces can be finished more quickly through the use of alloys that are easy to process.

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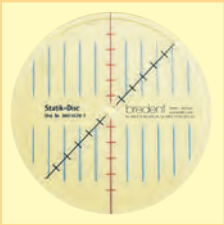
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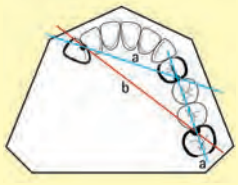
Statik-Disc

Time-consuming design drawings when planning CoCr dentures are no longer required if the Statik-Disc is used.
The statically correct position of the supporting elements is quickly determined by dentists and dental technicians.



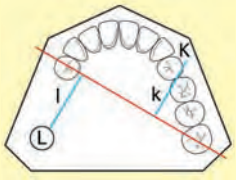
- quick determination of correct static
- can be applied individually to any situation
- suitable for all models
- simple handling

The clasp line principle
The clasp line principle applies to all denture constructions. The clasp supporting line (a) runs peripheral to the denture body. In the case of saddle dentures it should lie in the center of the jaw ridge. It is always obtained by connecting the clasp supports. The main clasp line (b) separates the jaw halves diagonally. It results from connecting the supports of tooth no. 13 and 27.



Statik-Disc
REF 360 0126 7

Determination of the tilting axis
Work arm and power arm are vertical on the tilting axis. The lever principle applies: load (L) x work arm (W) = power (P) x power arm (p). Load and power are given; therefore it must be attempted to keep power x power arm on the same level or higher than load x work arm.



Kennedy class I

On both sides the gaps are in the distal area of the residual dentition (bilateral free-end dentures). This type of denture creates the following static situation:
If a saddle is lowered after exposure to masticatory pressure, diagonal tensile stress is obtained on the opposite side. The rotation axis runs through the support on the same side and the end of the saddle on the opposite side.



Mark planned position of the tooth set up last on the modeled diagonal to the final natural tooth on the shorter arch. (1). The Statik Disc is placed on the model so that the red line runs through the center of the planned support between the planned tooth and the final natural tooth on the opposite side.
The red line is also the tilting axis.



The black line is turned to the planned support of the final natural tooth on the opposite side to determine where the final articifial tooth needs to be set up (2). Simultaneously the blue lines allow to read the power/load relationships. The blue lines have a distance of 10 mm to allow rapid and simple determination.
In this example it can be recognized that the power/work arm relationship is not perfect when integrating the final tooth. Accordingly, this tooth should not be replaced and thus the arch be shortened (3).

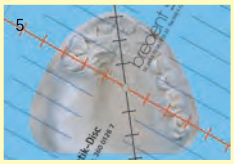


Kennedy class II

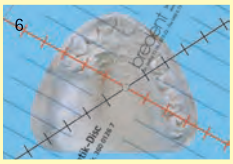
The gap is on one side in the distal area from the residual dentition (unilateral free end denture) or - in conjunction with a larger gap on the other side. This type of denture creates the following static situation:
Unless clasps are correctly attached to the denture, incorrect loading and tilting of the denture may be caused. Therefore a supporting element must be attached to avoid tilting .



The Statik-Disc is placed on the model so that the red line is in the center between the final tooth at the shortened arch (mesial support) and the last tooth on the opposite arch (mesial support).



The black line is turned so that it points to the desired tooth that was set up last. The position of the anti-tilting element is now indicated on the other side. If this element is situated mainly in the aesthetic area, the black line must be turned further to the mesial direction towards the tooth that is set up next. The position of the the antitilting element will then be shifted to the distal area.

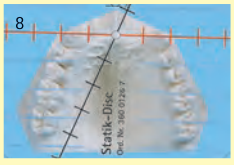


Kennedy class IV

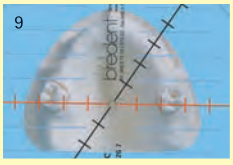
Kennedy class IV defines gaps that are located left or right from the central line and are limited by the residual dentition in the distal area.



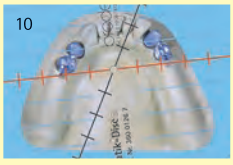
In this type of dentures, clasps are attached to the dorsal area. If the Statik-Disc is placed on so that the red line serves as tilting axis, the blue lines allow to recognized immediately that the power/work arm relationship can be balanced by the clasps attached to the dorsal area.



In this case the power arm is missing so that a long work arm is obtained. Open clasps with distal support must be used. The clasp arms act as retentions in the presence of tensile stress since they are held by the equator if exposed to pull-off movement.



Attachment techniques



The Statik-Disc also simplifies correct planning if attachments are used. In this case the red line is placed on the attachment; this line also serves as tilting axis. The power/work arm relationship is read with the help of the blue line and thus the expansion of the teeth to be set up can be determined.

bredent group
Telephone (+49) 0 73 09 / 8 72-4 40

Protek sculpturing wax



Protek sculpturing wax - emphasizes the contrast for improved viewing and adjusting.

Protek sculpturing wax
25 g, green
REF 510 0090 1



The sculpturing wax has the same consistency as all Protek components, which enables junctures to be waxed-up effortlessly and harmoniously. It is no longer necessary to carve from hard into soft wax.

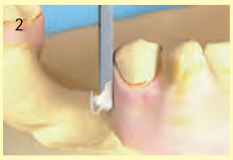
Biotec blocking out wax



Biotec blocking out wax
28 g, pink
REF 510 0061 5



The special components of the blocking out wax ensure perfect blocking out of undercuts.



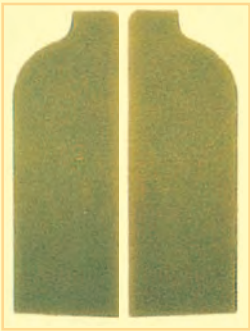
Easy and quick scraping allows to save time.



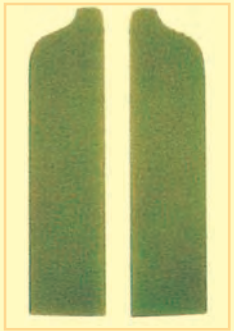
No color additives penetrate into the plaster surface after boiling out the model. The master model remains clean.

Special wax for blocking out undercuts in the entire field of CoCr work. Blocking out wax with very good scraping properties.
No discoloration on the plaster model after boiling out.

Protek saddle wax with pre-formed border



Protek saddle wax
Size A
0,40
REF 430 *571 0
90 pieces each, right/left
0,60
REF 430 *573 0
90 pieces each, right/left



Protek saddle wax
Size B
0,40
REF 430 *572 0
105 pieces each, right/left
0,60
REF 430 *574 0
105 pieces each, right/left





This self-adhesive saddle wax with pre-formed border, available in 2 sizes and thicknesses, guarantees that the underside of the acrylic is absolutely precise and even. The border matches the lingual bar joiners exactly.

* Also available as Protek summer wax (ideal wax quality for higher temperatures).
Just replace the asterisk in the REF with an „S" for summer wax or with „0" for standard wax quality.

Protek - Spacer wax



Protek-Spacer wax
75x150 mm plaques
15 pieces emp.

0,30 mm REF 430 *582 0
0,40 mm REF 430 *583 0
0,50 mm REF 430 *584 0
0,60 mm REF 430 *585 0

self-adhesive:
0,30 mm REF 430 *586 0
0,40 mm REF 430 *587 0
0,50 mm REF 430 *588 0
0,60 mm REF 430 *589 0



The quality of Protek spacer wax is better than ever before - extremely ductile and tear-resistant. After duplicating, it can be off the model without leaving a residue. Simplifies preparation of the model for duplicating and saves a great deal of time.

* Also available as Protek summer wax (ideal wax quality for higher temperatures).
Just replace the asterisk in the REF with an „S" for summer wax or with „0" for standard wax quality.

Lingual bar patterns



Protek lingual bar wax pattern
Ergonomically shaped lingula bar pattern. Adapatation is simplified by the concave shape matched with the jaw; hence time is saved during finishing.

Protek lingual bar wax pattern

3.6 x 1.85	30 pieces	**REF 430 0743 0**
	80 pieces	**REF 430 0748 0**



The conventional bar pattern is more difficult to adapt; a wax knife must be used for coating with wax.



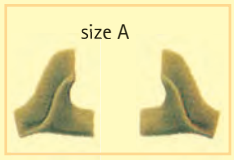
The Protek lingual bar wax pattern adapts to the gingival situation so that reshaping with the wax knife can be omitted.



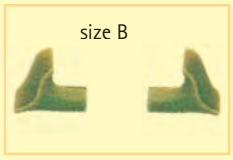
1.7 x 4	30 pc.	**REF 430 0124 C**
	80 pc.	**REF 430 0125 C**
2.0 x 4	30 pc.	**REF 430 0124 B**
	80 pc.	**REF 430 0125 B**
2.3 x 4	30 pc.	**REF 430 0124 A**
	80 pc.	**REF 430 0125 A**
2.45 x 4.3	30 pc.	**REF 430 012A 0**
	80 pc.	**REF 430 013A 0**
Assortment comprising 12 bars of each		**REF 430 0124 6**

Protek wax bars are available in 3 sizes to fit every type of jaw. Thanks to the structure of the wax they are easily adapted and exhibit no elastic recovery. The high pressure-resistance of this wax prevents deformation of the patterns and ensures that the framework pattern is shaped aesthetically.

Protek - Lingual bar joiners



- save work



1.7	le	A	**REF 430 517 LA**	1.7	le B	**REF 430 517 LB**	50 pc.
1.7	ri	A	**REF 430 517 RA**	1.7	ri B	**REF 430 517 RB**	50 pc.
2.0	le	A	**REF 430 520 LA**	2.0	le B	**REF 430 520 LB**	50 pc.
2.0	ri	A	**REF 430 520 RA**	2.0	ri B	**REF 430 520 RB**	50 pc.
2.3	le	A	**REF 430 523 LA**	2.3	le B	**REF 430 523 LB**	50 pc.
2.3	ri	A	**REF 430 523 RA**	2.3	ri B	**REF 430 523 RB**	50 pc.

Assortment:
15 pc. each
size A+B ri/le
1.7
REF 430 0575 0
2.0
REF 430 0576 0
2.3
REF 430 0577 0



The lower edge of the Protek joiner is shaped to fit the investment finishing line exactly, which was duplicated with Protek saddle wax.



Protek lingual bar joiners are available to fit every size of bar. The joiner is fitted into place and waxed onto the bar thus ruling out the need to wax-up the joint, which is very time-consuming. Protek lingual bar joiners are available in 2 sizes and matched to the three thicknesses of Protek lingual bar, to suit any situation.

Protek - Clasp / bar joiners



Protek - Clasp / bar joiner
size A, 100 pc. each
REF 430 0578 0



Protek - Clasp / bar joiner
size B, 100 pc. each
REF 430 0579 0



Interdental joinments of Protek clasps and bars effortlessly. The Protek joiner is matched to the relevant bar exactly and only requires placing in position.



lateral view

Assortment

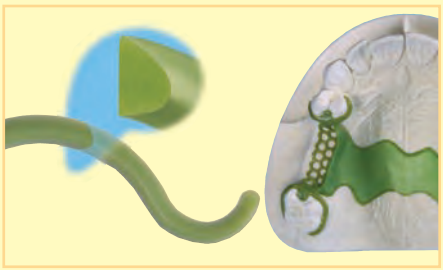
A+B 50 pc. each
REF 430 0580 0



If Opticast is brushed onto the pattern, the components do not have to be waxed together and even finest of cracks are sealed. The investment material cannot creep under the pattern.

bredent group

Clasp patterns



The bent premolar clasp features a shifted ridge to ensure that the chyme is carefully transported away via the papilla. Compared to the previous cross-section of the clasp this results in considerable protection of the periodontium.





When using this pre-bent clasp pattern, no compression or elongation will result whilst bending the wax. This way the casting of the clasp profile will be more homogeneous.

Premolar clasps, bent wlf pmk
10 trays
REF 430 0748 1

Premolar clasp, bent, for resin injection moulding

10 sheets of 20 clasps, 10 left + 10 right
REF 430 0748 5

Visit the course **„CoCr work is cast information".** Please request the course program!







The equator is marked in the usual way. The position is determined using the surveying plate 2 (undercut depth of 0.35 mm) of the Brenometer surveying system. If a short clasp is used (8 mm), the clasp tip is placed over the determined point (figure 1).







In the case of a premolar clasp (11 mm) the clasp tip is placed on the point (figure 2) and in case of a molar clasp (14 mm) the tip is placed below the point (figure 3). According to the determined position, the bent premolar clasps are placed against the tooth. Do not attach the patterns with wax to avoid changing the pattern.







During finishing, the cast clasps are only smoothed using a rubber polisher and the clasp tip is rounded off. This way the corresponding shape and the length of the pattern will always allow to obtain the same draw-off strength.



The clasp profile is separated from the central rod („tree") using a knife.



Place the clasp pattern on the template and cut off the desired length.



The pre-bent clasp pattern is placed against the corresponding tooth and fixed using the wax adapter, REF 360 0120 5. Do not attach with wax to avoid changing the pattern.



Thanks to the ideal clasp pattern design the chyme is directed away from the tooth and the gingiva is protected.

Accessories:

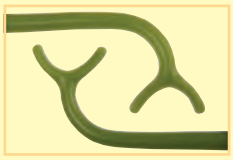


Wax adapter
REF 360 0120 5



Molar clasp
10 sheets
20 clasps each
REF 430 0157 1





Bonyhard clasp
10 sheets, 12 clasps each
REF 430 0157 6



Clasp patterns



Circumferential clasp, bent
10 sheets of 20 clasps **REF 430 0157 2**

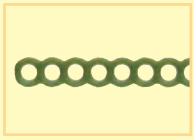
Thanks to their resistance to deformation and pressure, all Protek patterns can be fitted easily and quickly. All Protek components stay in place exactly when bent, which obviates the need to wax them into place and, especially in the case of clasp tips, avoids grinding which would otherwise be necessary.



Retentions

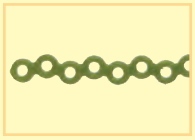
A wide range of retentions for any situation. Special wax offering high elasticity of bending for precise working.

Perforated retainers
25 pieces
13.5 cm long
REF 430 0159 0



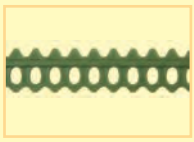


Perforated retainers staggered
25 pieces
13.5 cm long
REF 430 0159 1



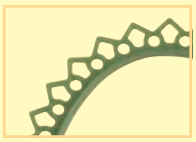


Comb-shaped retainers
25 pieces
13.5 cm long
REF 430 0157 5



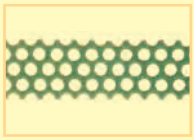


Finishing bands wral bent
20 pieces
REF 430 0157 7



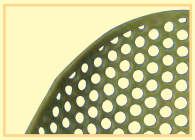


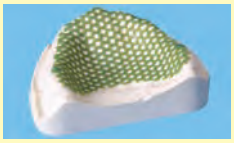
Perforated mesh
1.5 / 2.0
20 pieces 7x7 cm sheets
1.5
REF 430 0599 0
2.0
REF 430 0158 3





Reinforcing mesh upper, preformed
12 pieces
REF 430 0219 0





Wax sheets

Stippled wax sheets
transparent so that markings and areas to be reduced remain visible.

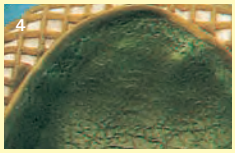




fine stippling plw green
0.30 mm 15 pieces **REF 430 *161 0**
0.35 mm 15 pieces **REF 430 *161 1**
0.40 mm 15 pieces **REF 430 *161 2**
0.45 mm 15 pieces **REF 430 *161 3**
0.50 mm 15 pieces **REF 430 *161 4**
0.60 mm 15 pieces **REF 430 *161 5**

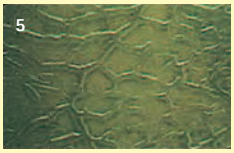
Protek wax sheets can be adapted effortlessly and will not split or crease, even in cases with very high palates.

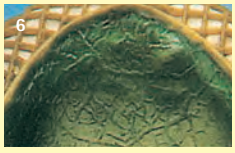




medium stippling plw
0.30 mm 15 pieces **REF 430 *161 6**
0.35 mm 15 pieces **REF 430 *161 7**
0.40 mm 15 pieces **REF 430 *161 8**
0.45 mm 15 pieces **REF 430 *161 9**
0.50 mm 15 pieces **REF 430 *162 0**
0.60 mm 15 pieces **REF 430 *162 1**

* Also available as Protek summer wax (ideal wax quality for higher temperatures).
Just replace the asterisk in the REF with an „S" for summer wax or with „0" standard wax quality.





coarse stippling plw
0.30 mm 15 pieces **REF 430 *162 2**
0.35 mm 15 pieces **REF 430 *162 3**
0.40 mm 15 pieces **REF 430 *162 4**
0.45 mm 15 pieces **REF 430 *162 5**
0.50 mm 15 pieces **REF 430 *162 6**
0.60 mm 15 pieces **REF 430 *162 7**

Assortment box



The Protek assortment box provides a clear overview and simplifies working procedures. Can be filled according to your wishes.

Protek assortment box E 12
(empty box without content)
REF 640 0084 0

All Protek patterns are available in refill packs which can be fully recycled and are harmless to the environment

Reels of wax pattern



Various diameters of wax pattern are available in medium and hard consistencies.

Flat section wax wgb

7.0 x 1.5 x 180 mm
220 g **REF 430 0156 0**

Reels of wax pattern, 250 g Cross-section in mm		**REF** blue (medium)	**REF** green (hard)
	1.2	**430 0115 0**	
	1.5	**430 0115 5**	
	2.0	**430 0116 0**	**430 0111 0**
	2.5	**430 0116 5**	**430 0111 5**
	3.0	**430 0117 0**	**430 0112 0**
	3.5	**430 0117 5**	**430 0112 5**
	4.0	**430 0118 0**	**430 0113 0**
	5.0	**430 0118 5**	**430 0113 5**





The wax patterns can be bent without recovering elastically or becoming pinched.

Quadro wax profile



Square sprues for better casting results.
Studies have shown that all liquids - including liquid metal - flow in drops; that also applies to flowing into a square sprue.
Accordingly, the gas (air) contained in the cavity (casting mould) can escape freely across the unfilled corners. Results:

- no swirling of molten metal due to the back pressure of the residual air
- faster flowing in of the molten metal
- more homogeneous castings
- smoother surfaces
- increased precision of fit



Quadro wax profile
250 g, green

- 1.75 x 1.75 **REF 430 0691 0**
- 2.25 x 2.25 **REF 430 0692 0**
- 3.00 x 3.00 **REF 430 0693 0**

Wax patterns cut to size wpz

Cross-section in mm, green

·	0.8	**REF 430 0125 0**
•	1.2	**REF 430 0121 0**
•	1.5	**REF 430 0121 5**
●	2.0	**REF 430 0122 0**
◡	1.8 x 0.9	**REF 430 0122 5**
◡	2.0 x 1.0	**REF 430 0123 0**
◡	3.0 x 1.5	**REF 430 0123 5**
◡	4.0 x 1.5	**REF 430 0124 0**
◡	4.0 x 1.7	**REF 430 0124 5**

Wax pattern assortment:
150 g
Size 1.2 mm and above wax patterns, cut to size
REF 430 0120 0



An assortment of round and semi-round wax patterns in high Protek quality - resistant to deformation and pressure, no elastic recovery which facilitates the attachment of retainers. All patterns are available separately in 55 g packs.

Protek wax adhesive wk 2 - soaks into the investment material



Wax adhesive wk 2
20 ml
REF 540 0099 0
100 ml
REF 540 0100 2
Thinner
100 ml
REF 540 0100 1



Protek wax adhesive can be applied to the model in a thin film and soaks into the investment material.



The patterns stick securely to the investment model, with no marginal gap whatsoever.

See „Sprues", chapter 5

Telephone (+49) 0 73 09 / 8 72-4 40

Pi-Ku-Plast / Pi-Ku-Plast HP 36





The micro-fine grain size allows to reproduce all details and increases the precision.

Advantages of Pi-Ku-Plast HP 36

Five translucent colors simplify control of layer thicknesses so that reworking is minimized.

Exceptional material properties such as perfect contouring characteristics and no slumping provide the precondition for top-quality casting results. The brush resin is available in five different colors. Both resins differ only in their contraction. HP 36 has a contraction value of just 0.036 %. Since the resin sets quickly, it is perfectly suitable for the fabrication of resin dies or resin copings in the double crown technique.



The flat, pointed shape of the brush which is available in two different sizes allows to take up the desired quantity of material and reduces material consumption.





Wet the brush with Pi-Ku-Plast HP 36 monomer. The amount and firmness of the Pi-Ku-Plast portion can be controlled by the amount of monomer and the time it is immersed in the polymer.

Assortments big Pi-Ku-Plast

3 vessels	blue	**REF 540 0017 3**
1 brush each, size A + B	yellow	**REF 540 0017 4**
1 brush holder	orange	**REF 540 0017 5**
100 ml cleaner	red	**REF 540 0017 6**
100 ml monomer	transparent	**REF 540 0017 7**
85 g polymer		

Assortments Pi-Ku-Plast HP 36

3 vessels	blue	**REF 540 0021 9**
1 brush each, size A + B	yellow	**REF 540 0021 7**
1 brush holder	orange	**REF 540 0021 8**
100 ml cleaner	red	**REF 540 0022 0**
100 ml monomer	transparent	**REF 540 0021 6**
85 g polymer		

Refill package

100 ml **cleaner**		**REF 540 0016 9**
85 g **polymer**		**REF 540 0016 7**
100 ml **monomer**	blue	**REF 540 0016 8**
	yellow	**REF 540 0017 8**
	orange	**REF 540 0017 9**
	red	**REF 540 0018 0**
	transparent	**REF 540 0018 1**

Refill package

100 ml **cleaner**		**REF 540 0022 4**
85 g **polymer**		**REF 540 0021 5**
100 ml **monomer**	blue	**REF 540 0021 3**
	yellow	**REF 540 0021 1**
	orange	**REF 540 0021 2**
	red	**REF 540 0021 4**
	transparent	**REF 540 0021 0**

Refill package

vessel for cleaner, 8 ml	**REF 540 0017 2**
vessel for monomer, 8 ml	**REF 540 0017 1**
vessel for polymer, 8 ml	**REF 540 0017 0**
brush size A + brush holder, 3 pieces	**REF 330 0114 6**
brush size B + brush holder, 3 pieces	**REF 330 0114 7**

Refill package

vessel for cleaner, 8 ml	**REF 540 0020 9**
vessel for monomer, 8 ml	**REF 540 0020 7**
vessel for polymer, 8 ml	**REF 540 0020 8**
brush size A + brush holder, 3 pieces	**REF 330 0114 6**
brush size B + brush holder, 3 pieces	**REF 330 0114 7**

Assortment small Pi-Ku-Plast

20 ml cleaner
2 modelling dishes silicone, red
20 ml monomer red
1 brush size B and brush holder
12 g polymer

REF 540 0019 6



Pi-Ku-Plast separating agent
10 ml
REF 540 0018 2

Pi-Ku-Plast / Pi-Ku-Plast HP 36



brush size A + holder
REF 330 0114 6



brush size B + holder
REF 330 0114 7



Dip the flat side of the brush into the polymer to take up large portions.



Dip the narrow side of the brush into the polymer to take up small portions.



Dip only the brush tip into the polymer to take up very small portions.

Optimal control of layer thickness thanks to the transparent colors of Pi-Ku-Plast



The high-lustrous reproduction of the metal surface of the primary element results in a perfect inner surface of the secondary element and thus allows to save precious working time.



Gap-free fit of the outer coping for unsurpassed precision of the cast secondary elements.

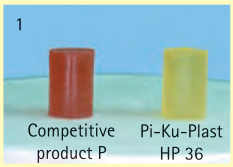


Pi-Ku-Plast separating agent, REF 54000182, allows to produce stable primary elements directly on the plaster die and provides a convincing alternative to wax.



Wax and metal can be connected rigidly using Pi-Ku-Plast HP 36 which renders the material universally suitable.

The incineration phase of the resin elements in the casting ring frequently determines whether dental castings could be produced successfully or not.



The competitor's resin and Pi-Ku-Plast HP 36 in the incineration test.



At 275°C the competitor's product foams and expands considerably.



At 300°C the competitor's product reveals distinctive expansion whereas Pi-Ku-Plast HP 36 reduces the volume.



Identical copings produced with brush resin.



The competitor's resin and Pi-Ku-Plast HP 36, prepared for investing.



The considerable expansion of the competitor's resin during the incineration phase resulted in the fracture of the investment material die in the casting ring. After casting, the crown is sealed with a lid and can not be used. A section through the cast crown (figure 8) shows the fractured die.





Owing to friction heat, the competitor's resin may reach the plasticity phase which may result in deformation of the model and require considerable reworking.



Pi-Ku-Plast HP 36 is insensitive to heat, retains dimensional stability and ensures precision of fit which is well above the standard.



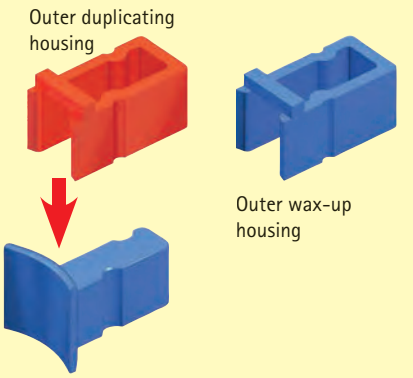
Allow the wax element to cool down to obtain a tension-free bridge model, separate using a thin blade and connect using Pi-Ku-Plast HP 36.



The extremely low shrinkage of Pi-Ku-Plast HP 36 allows to obtain a tension-free model and a precision-fit casting.

bredent group

Laser joint



Assortment

30 pieces
10 Inner housings
10 Outer duplicating housings
10 Outer wax-up housings
REF 440 0000 4

Laser weld joints rationally and precisely. The LV 1 laser joint ensures that the joint is always of the correct size, fits precisely and can be fabricated quickly.

Measurements in mm:

Inner housing	L 4.6 x W 1.6 x H 2.5
Outer duplicating housing	L 5.2 x W 2.6 x H 2.5
Outer wax-up housing	L 5.2 x W 2.6 x H 2.5

Refill packages:

Inner housing	16 pieces	**REF 440 0000 5**
Inner housing	50 pieces	**REF 440 0000 1**
Outer duplicating housing	16 pieces	**REF 440 0000 6**
Outer duplicating housing	50 pieces	**REF 440 0000 2**
Outer wax-up housing	16 pieces	**REF 440 0000 7**
Outer wax-up housing	50 pieces	**REF 440 0000 3**

Accessories:

Paralleling mandrel universal REF 360 0115 1

Custom laser joints are complicated and time-consuming to fabricate. To achieve precision of fit and high strength, the joint must be made to precise dimensions. The LV 1 laser joint ensures that the weld is strong and accurate. The outer housing cannot move due to contraction of the weld seam.



Wax the inner housing of the laser joint onto the outer housing - It only has to be paralleled if the outer housing is to be welded at two spots. Please note: The approximal „collar" should always face the occlusal aspect.



Before duplicating, place the red outer duplicating housing on the inner housing of the laser joint.



Before casting the investment model, replace the red outer duplicating housing with a blue outer wax-up housing. The outer duplicating housing is red - the outer wax-up housing is blue.



Shows the investment model with a outer wax-up housing: The chrome cobalt framework should be waxed up as usual. The interior dimensions of the outer wax-up housing are slightly larger than those of the outer duplicating housing. Therefore, the cast chrome cobalt framework fits the inner housing without requiring adjusting. The retention grooves can also be used to check the position of the outer housing.

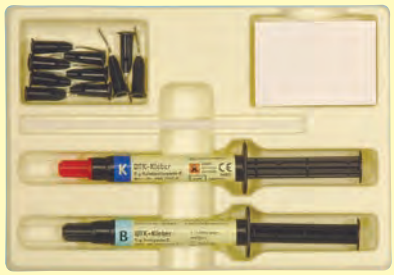


Before welding the outer housing, remove the occlusal bar from the LV 1 laser joint. The outer housing should be fixed in place with two spot-welds placed diagonally above and two beneath the joint. The precision of fit should then be checked. The entire joint should then be welded, placing the welds diagonally.



The outer wax-up housing is minimally oversized. This ensures that the joint fits precisely after welding. If several outer housings are to be welded, proceed consecutively - always weld one joint properly, check the precision of fit and then fix the next housing in place.

DTK-adhesive



Dual-hardening composite adhesive for the fixation of dental attachment elements.

DTK-adhesive
REF 540 0010 6



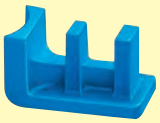
Accessories:

Catalyst paste K,	5 g	**REF 540 0111 K**
Base paste B,	5 g	**REF 540 0111 B**
Mixing block,	10 pieces	**REF 330 0114 4**
Spatula,	100 pieces	**REF 330 0114 3**

Double-T Adhesive Connector



Tension-free, precise and low-cost metal junctures can be prepared very quickly with only very little space required.



Patrix



Matrix



Patrix with duplicating matrix



Patrix with Matrix

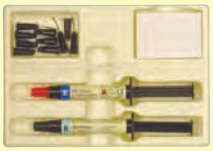


Duplicating matrix

Different inclination angles and sizes for all jaw situations

Ill. 1:1	90° A	90° B	120° A	120° B
Patrix	L 6.0 mm W 4.0 mm H 3.5 mm	L 4.5 mm W 2.5 mm H 3.5 mm	L 7.0 mm W 4.0 mm H 5.0 mm	L 5.0 mm W 2.5 mm H 3.0 mm
16 pieces	**REF 430 0405 A**	**REF 430 0405 B**	**REF 430 0402 A**	**REF 430 0402 B**
50 pieces	**REF 430 0342 A**	**REF 430 0342 B**	**REF 430 0422 0**	**REF 430 0423 0**
Matrix	L 5.5 mm W 4.0 mm H 3.0 mm	L 4.0 mm W 2.5 mm H 2.0 mm	L 5.5 mm W 4.0 mm H 3.0 mm	L 4.5 mm W 2.5 mm H 2.5 mm
16 pieces	**REF 430 0404 A**	**REF 430 0404 B**	**REF 430 0401 A**	**REF 430 0401 B**
50 pieces	**REF 430 0341 A**	**REF 430 0341 B**	**REF 430 0420 0**	**REF 430 0421 0**
Duplicating matrix	L 5.5 mm W 4.0 mm H 3.0 mm	L 4.0 mm W 2.5 mm H 3.0 mm	L 5.5 mm W 4.0 mm H 3.0 mm	L 4.5 mm W 2.5 mm H 2.5 mm
16 pieces	**REF 430 0406 A**	**REF 430 0406 B**	**REF 430 0403 A**	**REF 430 0403 B**
50 pieces	**REF 430 0343 A**	**REF 430 0343 B**	**REF 430 0424 0**	**REF 430 0425 0**
Paralleling mandrel, 1 piece	**REF 430 0345 A**	**REF 430 0345 B**	**REF 430 0344 A**	**REF 430 0344 B**

Accessories:



DTK-adhesive
REF 540 0010 6

Assortment

Double-T Adhesive Connectors dtk 90°

5 Patrices A
5 Patrices B
10 Matrices A
10 Matrices B
5 Duplicating matrices A
5 Duplicating matrices B
1 Paralleling mandrel each, size A + B

REF 430 0340 0

Assortment

Double-T Adhesive Connectors dtk 90°

3 Patrices A
3 Patrices B
6 Matrices A
6 Matrices B
3 Duplicating matrices A
3 Duplicating matrices B

REF 430 0347 0

Assortment

Double-T Adhesive Connectors dtk 120°

5 Patrices A
5 Patrices B
10 Matrices A
10 Matrices B
5 Duplicating matrices A
5 Duplicating matrices B
1 Paralleling mandrel each, size A + B

REF 430 0408 0

Assortment

Double-T Adhesive Connectors dtk 120°

3 Patrices A
3 Patrices B
6 Matrices A
6 Matrices B
3 Duplicating matrices A
3 Duplicating matrices B

REF 430 0407 0

Double-T Adhesive Connector

Double-T Adhesive Connectors at the crowns

Patrixes must be fixed parallel



The patrix with the paralleling mandrel is waxed onto the wax pattern.



Depending on the jaw situation, use the 90° or 120° patrix.



Place the precision-fit duplicating matrix onto the patrix and fix it.



Prepare the model for duplicating in the usual way. The duplicating matrix must not be modified.



Insert the blue matrix in the duplicating mould at the preshaped point



and prepare the investment material model. Now the blue matrix is in the correct position on the matrix.



Prepare the CoCr pattern in the usual way and connect it with the matrix.



After casting, sandblast the matrix and finish and polish the CoCr object.

Double-T Adhesive Connectors at the CoCr frame

Patrixes can be adapted to the jaw situations, no parallelism required.



The patrix is waxed onto the CoCr structure and the shape remains unchanged.



After finishing and polishing of the CoCr object, the crowns are modelled and the matrix is waxed on.



Fit the crown, sandblast the joints using 110 µm aluminium oxide and ensure stress-free glueing to the CoCr object.

Double-T Adhesive Mini Connector dtk



dtk mini
Thanks to the 2 different sizes A+B, the 3 different angles 90°, 105° and 120° and the minimal dimensions of the prefabricated wax patterns, the correct type of connector can be fabricated for all cases.

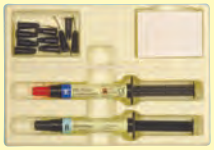


dtk mini front
dtk-front for tooth-bounded gaps in the anterior region. No problems with space when setting up anterior teeth, even in cases with severe overbites.



dtk mini super flat
dtk-super flat: A super flat connector for use in the posterior region. Maximum strength yet requires only a minimal amount of space.

Accessories:



DTK-adhesive
REF 540 0010 6

dtk mini		90° A	90° B	105° A	105° B
Patrix		L 11.0 mm W 3.0 mm H 4.0 mm	L 7.5 mm W 2.5 mm H 3.5 mm	L 10.0 mm W 3.0 mm H 4.0 mm	L 7.5 mm W 2.5 mm H 3.5 mm
16 pieces		**REF 430 0693 A**	**REF 430 0693 B**	**REF 430 0699 A**	**REF 430 0699 B**
50 pieces		**REF 430 0694 A**	**REF 430 0694 B**	**REF 430 0700 A**	**REF 430 0700 B**
Matrix		L 5.5 mm W 3.0 mm H 3.0 mm	L 3.0 mm W 2.5 mm H 3.0 mm	L 5.5 mm W 3.0 mm H 3.0 mm	L 3.0 mm W 2.5 mm H 3.0 mm
16 pieces		**REF 430 0691 A**	**REF 430 0691 B**	**REF 430 0697 A**	**REF 430 0697 B**
50 pieces		**REF 430 0692 A**	**REF 430 0692 B**	**REF 430 0698 A**	**REF 430 0698 B**
Duplicating matrix		L 5.5 mm W 3.0 mm H 3.0 mm	L 3.0 mm W 2.5 mm H 3.0 mm	L 5.5 mm W 3.0 mm H 3.0 mm	L 3.0 mm W 2.5 mm H 3.0 mm
16 pieces		**REF 430 0689 A**	**REF 430 0689 B**	**REF 430 0695 A**	**REF 430 0695 B**
50 pieces		**REF 430 0690 A**	**REF 430 0690 B**	**REF 430 0696 A**	**REF 430 0696 B**

dtk mini		120° A	120° B	dtk mini front	dtk mini super flat
Patrix		L 10.0 mm W 3.0 mm H 4.0 mm	L 7.5 mm W 2.5 mm H 3.5 mm	L 9.0 mm W 2.0 mm H 2.0 mm	L 10.0 mm W 5.0 mm H 2.0 mm
16 pieces		**REF 430 0705 A**	**REF 430 0705 B**	**REF 430 0711 0**	**REF 430 0717 0**
50 pieces		**REF 430 0706 A**	**REF 430 0706 B**	**REF 430 0712 0**	**REF 430 0718 0**
Matrix		L 5.5 mm W 3.0 mm H 2.5 mm	L 3.0 mm W 2.5 mm H 2.5 mm	L 5.5 mm W 2.0 mm H 1.5 mm	L 6.0 mm W 5.0 mm H 2.0 mm
16 pieces		**REF 430 0703 A**	**REF 430 0703 B**	**REF 430 0709 0**	**REF 430 0715 0**
50 pieces		**REF 430 0704 A**	**REF 430 0704 B**	**REF 430 0710 0**	**REF 430 0716 0**
Duplicating matrix		L 5.5 mm W 3.0 mm H 2.5 mm	L 3.0 mm W 2.5 mm H 2.5 mm	L 5.5 mm W 2.0 mm H 1.5 mm	L 6.0 mm W 5.0 mm H 2.0 mm
16 pieces		**REF 430 0701 A**	**REF 430 0701 B**	**REF 430 0707 0**	**REF 430 0713 0**
50 pieces		**REF 430 0702 A**	**REF 430 0702 B**	**REF 430 0708 0**	**REF 430 0714 0**

bredent group

Telephone (+49) 0 73 09 / 8 72-4 40

Double-T Adhesive Mini Connector dtk

Assortment

dtk mini A + B
90°, 105°, 120°
with 2 connectors each
90°, 105°, 120°
1 Paralleling mandrel 90°
1 Paralleling mandrel 105°/120°
2 anterior connectors
2 super flat connector

REF 430 0558 0

Assortment

dtk mini A + B
90°
3 Patrices each
6 Matrices each
3 Duplicating matrices each

REF 430 0684 0

Paralleling mandrel
REF 430 0623 0

Assortment

dtk mini A + B
105°
3 Patrices each
6 Matrices each
3 Duplicating matrices each

REF 430 0685 0

Paralleling mandrel
REF 430 0112 0

Assortment

dtk mini A + B
120°
3 Patrices each
6 Matrices each
3 Duplicating matrices each

REF 430 0686 0

Paralleling mandrel
REF 360 0112 0

Assortment

dtk mini front
A + B
3 Patrices each
6 Matrices each
3 Duplicating matrices each

REF 430 0687 0

Assortment

dtk mini super flat
A + B
3 Patrices each
6 Matrices each
3 Duplicating matrices each

REF 430 0688 0

dtk mini





Thanks to the 3 different angles of the patrixes, the prefabricated wax patterns can be jawn optimally.



Precisely fitting duplicating matrices blocked out on the patrices - ready for duplicating.



Once the crome cobalt has been polished, adhere - non-stressed - with auto-curing resin cement or composite.

dtk mini front





The dtk-Front in minute, for use in the anterior region. The bar has a notch on its underside to ensure that the papillae remain unimpeded at all times. As this component has been reduced as much as possible, it is only used in tooth-bounded gaps in the anterior region.



Precisely fitting duplicating matrices in the patrices. Block out and duplicate using standard procedures. Can be integrated into the chrome cobalt denture optimally, even if the alveolar ridge is very narrow.



Non-stressed connectors without having to solder - even possible where too little space is available. There is always sufficient space to arrange the anterior teeth as required, even in cases where the teeth are very small.

dtk mini super flat





Super flat adhesive connector - total height only 2 mm for use in the posterior region. Adheres extremely well thanks to the retentive surface being as large as possible. As the waxed surface is relieved to prevent the papillae being impeded, it can be adapted perfectly to the alveolar ridge.



Precisely fitting, super flat, duplicating matrix. This is replaced with the matrix - with an 0.2 mm cement gap - in the duplicating mould.



Super flat, non-stressed adhesive connectors in the posterior region - sufficient space occlusally for setting up denture teeth. Adhere instead of soldering - even if too little space is available.

Optiguss

The solution for increased perfection with less effort.
Optiguss Micro – 5 micron coating – or Optiguss Macro – 10 micron coating – can be applied easily and quickly to the wax pattern to smooth, seal and reinforce it without changing its shape.
The use of Optiguss reduces the finishing time by 50 % compared to a conventional cast surface.



Optiguss-macro 15 ml
REF 520 0092 0

Optiguss-micro 15 ml
REF 520 0093 0



Optiguss mixing well macro
2 pieces
REF 390 0035 0



3 **Brushes** size A + brush holder **REF 330 0114 6**

3 **Brushes** size B + brush holder **REF 330 0114 7**

3 **Brushes** size C + brush holder **REF 330 0114 8**



Brush cleaning pot
2 pieces
REF 390 0037 0



Brush cleaner
20 ml
REF 520 0094 0

Assortment



15 ml Optiguss-macro
15 ml Optiguss-micro
3 Brushes size A
3 Brushes size B
3 Brushes size C
2 Brush cleaning pot
1 Brush cleaner

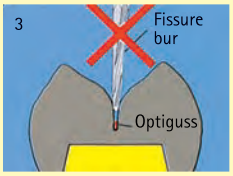
REF 520 0091 0



Even when the pattern is waxed-up as carefully as possible, minute scratches and rough areas remain in the wax which have to be trimmed out of the casting.



Applying Optiguss creates super smooth surfaces.



Deep fissures, which cannot be reached with a fissure bur, can be smoothed with Optiguss. This simplifies polishing of gnathologically designed occlusals.



The finishing time can be reduced by more than 50 % due to more homogeneous surfaces.



Approximal contact areas are strengthened, yet retain their shape.



Fitting surfaces are built-up properly and smoothed, which reduces the time required for trimming.

Exaktosil N 15 / N 21

Tests have proven the excellent properties of Exaktosil! The silicone duplicating materials Exaktosil N15 and N21 with a processing time span of 5 - 6 minutes are highly fluid and hence ensure accurate reproduction of details. Thanks to the exceptional restoring capacity, the high tear resistance and elongation at rupture, Exaktosil silicone duplicating materials protect moulds against damage when removing them and offer technicians a superior level of quality. The suitable silicone duplicating material for all types of indications - Exaktosil!



Linear dimemsional change: 1.8 ‰ (according to DIN EN 24 823)
A specimen (stylized dental arch) is duplicated with Exaktosil N 21.

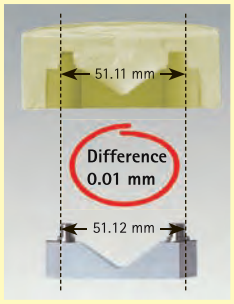


Exaktosil N 15
Component A
1000 ml
REF 540 0114 A

Exaktosil N 15
Component B
1000 ml
REF 540 0114 B

Assortment

Exaktosil N 15
1000 ml A
1000 ml B
REF
540 0103 8



Comparison of the dimensions of the specimen and the duplicating mould.
The extraordinary low shrinkage of only 1.8 ‰ ensures precise fit of CoCr objects.

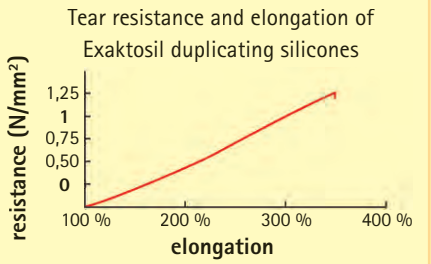


Exaktosil N 15
Component A
5000 ml
REF 540 0115 A

Exaktosil N 15
Component B
5000 ml
REF 540 0115 B

Assortment

Exaktosil N 15
5000 ml A
5000 ml B
REF
540 0103 9



The high tear resistance of approx. 1.25 N/mm² and an elongation at rupture of approx. 350 % protects duplicating moulds against damage when removing the material from the mould.



Exaktosil N 21
Component A
1000 ml
REF 540 0116 A

Exaktosil N 21
Component B
1000 ml
REF 540 0116 B

Assortment

Exaktosil N 21
1000 ml A
1000 ml B
REF
540 0114 7







Exaktosil N 21
Component A
5000 ml
REF 540 0117 A

Exaktosil N 21
Component B
5000 ml
REF 540 0117 B

Assortment

Exaktosil N 21
5000 ml A
5000 ml B
REF
540 0114 8





Technosil duplicating silicone



Addition-cured, shrinkage- and filler-free duplicating material for dimensionally accurate duplicates. Technosil NT is mixed in the ratio of 1:1 for simple processing. The shore hardness of 25 makes the material suitable for „ringless" model fabrication with the bredent duplicating system.

Technosil NT duplicating silicone
1000 g of
Component A **REF 540 TS01 A**
Component B **REF 540 TS01 B**



The short setting time allows to continue working quickly. Reduced shrinkage for accurate models.



Technosil NT duplicating silicone
5000 g of
Component A **REF 540 TS05 A**
Component B **REF 540 TS05 B**

Assortment

Technosil NT duplicating silicone component A + B 1000 g each

REF 540 TS01 0

Assortment

Technosil NT duplicating silicone component A + B 5000 g each

REF 540 TS05 0

Technolit



Surface tension reducing agent avoids the formation of bubbles and improves the flow characteristics of investment material and plaster.

Technolit
125 ml
REF 520 ET12 5



After a reaction time of 2 minutes the duplicating mould is blown dry using compressed air. Technolit avoids surface segregation for investment materials and plasters. Consequently, a more homogeneous surface is achieved.



Refill package
750 ml
REF 520 ET75 0

bredent group

Duplicating system

The duplicating method as major element and basis for highly accurate duplicates. The stable plastic components ensure precision during duplicating and reduce errors.



Flask tray
large,
REF 520 DBKS G
small,
REF 520 DBKS K



Flask sleeve
large,
REF 520 DBKM G
small,
REF 520 DBKM K



Spacer - base insert
large,
REF 520 DBPE G
small,
REF 520 DBPE K



Stabilizer
large,
REF 520 DBBS
small,
REF. 520 DBBS K



Investment aid, aluminium
REF 520 DBAL W



Block-out kneading material
100 g
REF 540 0101 8



The flask tray serves as basis for the flask sleeve.



The flask sleeve is placed into the flask tray to ensure a stable position.



The spacer - base insert is filled with block-out material to ensure safe hold of the model when duplicating and to exclude shifting.



The block-out kneading material is used to fix the model and to block out undercuts. It will not bond to the silicone and can be reused.



The model is placed in a central position onto the block-out kneading material.



The stabilizer is put into the opening of the flask sleeve and the height is adusted according to the model. This protects the silicone mould against undesired deformation when filling the mould.



The flask sleeve is filled with Technosil.



The duplicating mould is fixed using the aluminium investment aid. Stress-free model fabrication is guaranteed on every type of surface.



Small and large sets.

Assortment

small, 5 pieces
1 flask tray
1 flask sleeve
1 spacer - base insert
1 stabilizer
1 investment aid, aluminium

REF 520 DBST K

Assortment

large, 5 pieces
1 flask tray
1 flask sleeve
1 spacer - base insert
1 stabilizer
1 investing aid, aluminium

REF 520 DBST G

Duplicating system - Starter Set

22 pieces
1 flask tray each large and small
1 flask sleeve each large and small
2 spacers - base inserts each large and small
3 stabilizers each large and small
2 investment aids, aluminium
2 block-out kneading materials
125 ml Isosil
je 1000 g Technosil duplicating silicone A+B
125 ml Technolit

REF 520 DBST E

Isosil



Isosil
125 ml
REF 520 IS12 5



Refill package
750 ml
REF 520 IS75 0



Plastic components that are wetted with Isosil allow easy removal or repositioning of the duplicating mould.

Master-Copy



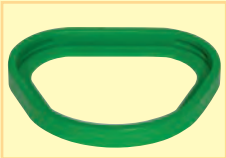
The perfect model duplicating system with transfer into the articulator.



The investment material model in the articulator features exactly the same occlusion and precision of fit as the master model.



Master-Copy base plate
1 piece
REF 360 0124 0



Master-Copy base plate ring
1 piece
REF 360 0124 1



Master-Copy silicone sleeve large
1 piece
REF 360 012M G



Master-Copy stabilizer large
1 piece
REF 360 012S G



Master-Copy stabilizer small
1 piece
REF 360 012S K



Master-Copy silicone sleeve small
1 piece
REF 360 012M K



Master-Copy base former
1 piece
REF 360 0124 2



Magnetic plates
50 pieces
REF 360 0118 1

Assortment large
REF 360 0125 6



Master-Copy base plate
1 piece



Master-Copy base plate ring
1 piece



Master-Copy silicone sleeve large
1 piece



Master-Copy stabilizer large
1 piece



Master-Copy base former
1 piece



Magnetic plates
50 pieces

Prerequisite for the function of the Master-Copy system is the fact that the model has been processed with the Master-Split. Please request brochures on the Master model system.

bredent group

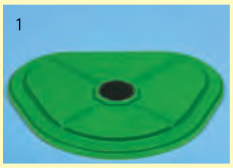
Telephone (+49) 0 73 09 / 8 72-4 40

Master-Copy



The initial situation ...

A frequently occurring initial situation. The lower jaw model must be duplicated for the CoCr structure.



The base plate is the basis for the master model. The model produced with Master-Split fits exactly on the base plate.



The master model is fixed on the master model with the magnet.



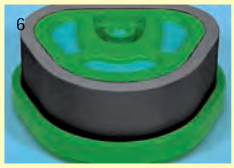
The base ring is placed on the base plate with the master model.



The snap of the silicon sleeve is ensured by catches in the base ring and the sleeve is held safely.



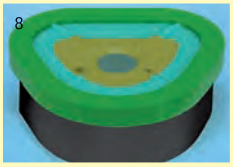
The stabilizer provides absolute stability and a highly uniform silicone layer in the tooth area.



The Master-Copy duplicating mould is filled with silicone up to the openings of the stabilizer.



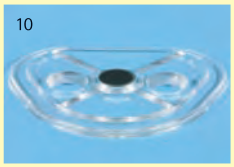
Once the silicone has hardened, turn the duplicating mould and remove the base plate.



The model can be lifted by blowing in compressed air and removed from the mould.



If the model is difficult to remove, the base ring can be removed temporarily.



The base former features a magnetic plate.



The duplicating mould is filled with investment material up to 5 mm below the rim.



The base former is placed on and the mould is filled up to the base plate. Entrapped air can be easily recognized.



... the result

After hardening, the model is removed from the mould and the points for casting-on are ground. The model can be placed into the articulator.

Bre-Gel 1

Low-viscous agar duplicating gel for precise investment material models, suitable for microwave units



Bre-Gel BG 1
6000 ml
REF 540 0103 6



Low-viscous consistency
Bubble-free casting thanks to excellent flow characteristics.

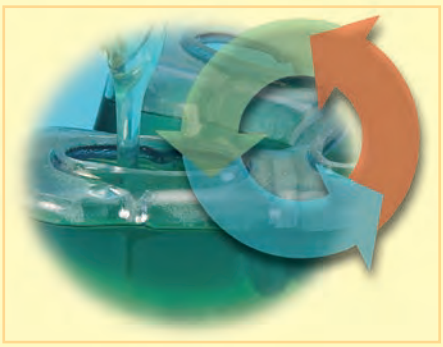


Transparent color
Perfect control during exposure of the model due to transparent color and low viscosity.

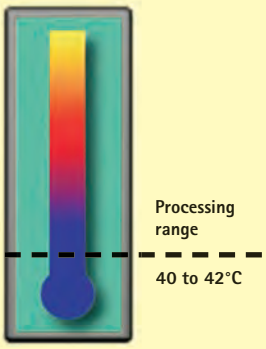


High edge stability
Stable edges ensure precise reproduction of details of the duplicate models.

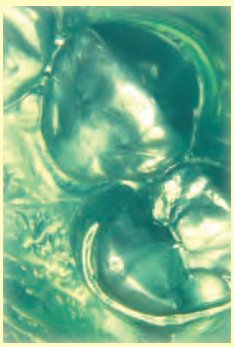
Remeltable
Low viscosity to ensure bubble-free casting.



Can be remelted in the duplicating unit or the microwave at least 20 times due to the reversibility.



Processing range
40 to 42°C



A low pouring temperature with minimum difference between the gel and model guarantees tension-free, detailed duplicates.

Bre-Gel 2 opaque, Bre-Gel 3 opaque-liquid

Opaque duplicating gel for the entire duplicating technique, suitable for microwaves.



Bre-Gel BG 2 opaque
6000 ml
REF 540 0105 3



Bre-Gel BG 3 opaque-liquid
4 x 400 ml
REF 540 0105 4



Opaque Color.
The bright, opaque color simplifies the evaluation of filigree duplicating areas.



Low-viscous consistency.
Slow pouring in of the low-viscous duplicating gel avoids the formation of bubbles.



High tensile strength
The high elasticity and tensile strength allow easy removal from the cast even in undercut areas. Thus precise working is also possible in the resin casting technique.



The outstanding elasticity ensures recovery of deformed duplicating areas when removing the duplicate model.

Microkeramik

Perfect cast surfaces thanks to microfine ceramic layers for crowns and bridges and CoCr work.



In the field of crowns and bridges, Microkeramik is especially suitable for NP alloys since very fine cast surfaces are obtained. The Microkeramik is adapted to the expansion of the investment material.



An extended processing time span allows precise application of the Microkeramik. Microscopically fine ceramic particles ensure perfect reproduction of very fine details of wax models.

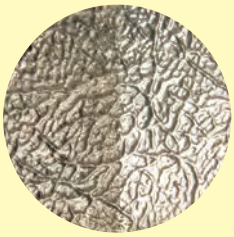


The difference after sandblasting with glass beads can be clearly recognized: The entire oxide layer can be asily removed so that less working time is required.

Microkeramik
without **with**



Devesting is simplified since there is no bonding between the investment material and Microkeramik.



Microkeramik avoids extreme formation of oxide on NPM alloys. Cast objects are only sandblasted with 50 µ glass beads to obtain almost perfect high luster. Consequently, time for further processing is saved.



Microkeramik
125 g
REF 550 0001 2

Accessories:



3 **Brushes** size A
+ 1 brush holder
REF 330 0114 6



3 **Brushes** size B
+ 1 brush holder
REF 330 0114 7



3 **Brushes** size C
+ 1 brush holder
REF 330 0114 8

Brevest M1

Very precise, universal investment material for all CoCr alloys. Precision-fit crowns and bridges, clasps and CoCr attachment work as well as one piece casting work can be produced with two different liquids.



Bresol N *
1000 ml bottle
REF 520 000N 1

5000 ml canister
REF 520 000N 5

Brevest M1
40 bags 200 g each
REF 570 0000 8

100 bags 200 g each
REF 570 0002 0

* frost-resistant

Assortment

20 bags 200 g each Brevest M1
1000 ml Bresol C+B *
1000 ml Bresol M *
REF 570 0002 2

Please order the course documents for the attachment course VS 3 and one piece casting!

Accessories:



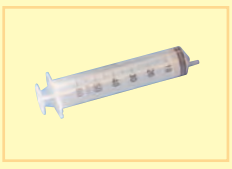
Dosing bottle
REF 520 0101 1



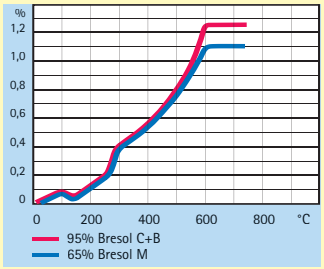
The frost-resistant Bresol C+B liquid which is suitable for expansion control is used for crowns and bridges.



For the precise one piece casting technique different expansion values can be obtained using Brevest M1. The extended reworking time span of 5 to 6 minutes provides the perfect precondition for this purpose.



Dosing syringe
6 pieces
REF
520 0101 2



The frost-resistant precision liquids Bresol C+B and Bresol M are perfectly suitable for all types of CoCr work in the entire field of dental techniques.



Due to optimal expansion control perfect fit of attachments and CoCr clasps can be achieved.

Brevest Rapid 1



Rapid-heating, universal precision investment material for crowns and bridges as well as the entire field of CoCr work.

Bresol R
1000 ml bottle
REF 520 000R 1
5000 ml
REF 520 000R 5

Brevest Rapid 1
50 bags 160 g each
REF 570 160R 8
125 bags 160 g each
REF 570 16R2 0

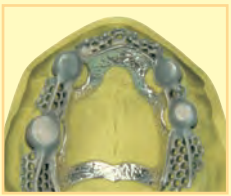
Brevest Rapid 1
40 bags 200 g each
REF 570 000R 8
100 bags 200 g each
REF 570 00R2 0

Accessories:

Dosing bottle
REF 520 0101 1
Dosing syringe
6 pieces
REF 520 0101 2



Fine grained, rapid-heating precision investment material for all large-span bridges, can also be used without casting rings.



Perfectly suitable for one piece casting. Precise expansion control with Bresol R.



Brevest Rapid 1 can be placed into the furnace at a temperature of 900 °C already 15 minutes after mixing.

Assortment

25 bags 160 g each
Brevest Rapid 1
1000 ml Bresol R
REF 570 160R 4

20 bags 200 g each
Brevest Rapid 1
1000 ml Bresol R
REF 570 0002 5



Accurate and precise attachment work and CoCr clasps – even if little time is available.

Brevest exakta M and Brevest exakta Speed

Phosphate-bonded investment materials for gel and silicone duplicating. The expansion for attachment work and CoCr clasps can be precisely controlled with the frost-resistant special mixing liquids.



Brevest exakta M
20 bags 400 g each
REF 570 00XM 8
50 bags 400 g each
REF 570 0XM2 0

Bresol N *
1000 ml bottle
REF 520 000N 1
5000 ml canister
REF 520 000N 5

Assortment

10 bags 400 g each
Brevest exakta M
1000 ml Bresol N *
REF 570 0002 3





Brevest exakta Speed
20 bags 400 g each
REF 570 0ES0 8
50 bags 400 g each
REF 570 0ES2 0

Bresol Speed *
1000 ml bottle
REF 520 000S 1
5000 ml
REF 520 000S 5

* frost-resistant

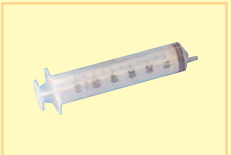
Assortment

10 bags 400 g each
Brevest exakta Speed
1000 ml Bresol Speed *
REF 570 0ES0 4

Accessories:



Dosing bottle
REF 520 0101 1



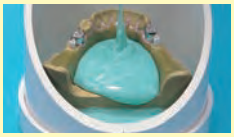
Dosing syringe
6 pieces
REF 520 0101 2

Gel duplicating



Brevest exakta M and Brevest exakta Speed are particulary suitable for gel duplicating. After devesting, the investment material model is hardened in Duro-Top immersion hardener.

Silicone duplicating



These investment materials feature good flow characteristics and a processing time span of 2 to 3 minutes. No tension reducing agent is required for silicone duplicating.

Brevest ESG

Special investment material in the one piece casting technique for extra-smooth surfaces.



Assortment

Brevest ESG
20 Beutel 200 g each
500 ml Bresol ESG
1 Transfuser
REF 570 ESG0 4

Bresol ESG
500 ml
REF 570 ESG0 5



- Harmonized products to reduce effort and allow for easy to achieve precision castings
- Safe making of dental restorations by simple work flow
- Reduction of miscasts allows efficient work
- Repeatable results boost your success
- High precision fit minimizes trimming time



A carefully blocked out model shortens wax up time and reduces fitting efforts of Secondary construction.



A correct sized duplicating flask is chosen. This doublicating system reduces waste of silicone and is
the basis for precision fit secondary constructions.



Only the primary parts are poured with special investment ESG using the Transfuser silicone tool. This gives a defined expansion for the precision fit secondary construction.



The entire mould is poured with Brevest Rapid 1 after setting of ESG investment. Both investments join very well.



The correct mixing ratio of each investment is key for a perfect fit. Adapting the investments to your lab equipment is provided by a bredent System Consultant on site. This guarantees smooth workflow and repeatable results.



The special funnel avoids velocities when casting and reduces trapped air inside the cast.



Ready for veneering using visio.lign shells which stand for fit, esthetics and speed.

Brealloy F 400





CoCrMo alloy for clasps and attachments in chrome cobalt restorations.
Brealloy F 400 is nickel-free and complies with the standard DIN EN ISO 6871 – part 1: 1996.

Brealloy F 400	VPE	100 g	500 g	1000 g
Cylinder, 7.5 g each	**REF**	**500 ML10 0**	**500 ML50 0**	**500 ML00 0**

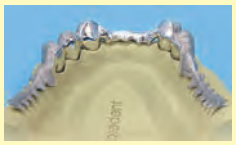








The outstanding material properties of Brealloy F 400 allow rapid finishing and polishing.







Brealloy F 400 features a hardness of 400 HV 10. The alloy has been especially developed for non-precious attachment dentures. The chrome cobalt system of bredent offers additional innovative techniques allowing the production of locks and individual screw connections using Brealloy F 400. The combination of the physical values of Brealloy F 400 allows to obtain extremely slender chrome cobalt clasp dentures. Your patients will be enthusiastic about the high comfort of wear of these dentures.

Physical values **(guide values)**	
Density (g/cm³)	8.4
Vickers hardness (HV 10)	400
Solidus point (°C)	1320
Liquidus point (°C)	1380
Casting temperature (°C)	1480
0.2 % proof stress (MPa)	700
Modulus of elasticity (MPa)	approx.220.000
Tensile strength (MPa)	900
Elongation at break (%)	4
Expansion coefficient (TEC 25 - 600 °C)	15 µm/mk

Composition **(in mass %)**	
Cobalt	64.7
Chrome	29
Molybdenum	5
Manganese	0.4
Silicone	0.5
Carbon	0.4

Accessories:

Brealloy solder	**Brealloy flux**
7 g	8 g
REF 500 0001 0	**REF 500 0001 1**

Brealloy MO



An alloy designed to meet the requirements of the production of clasp and attachment model castings and for single shot casting technology. Easy shaping reduces milling material use. Brealloy MO is nickel-free.

Brealloy MO
100 g
REF 500 M010 0
500 g
REF 500 M050 0
1000 g
REF 500 M00 0

Physical properties (guide values)	
Density (g/cm³)	8.3
Vickers hardness (HV 10)	380
Solidus point (°C)	1260
Liquidus point (°C)	1350
Casting temperature (°C)	1420
0.2% proof stress (mPa)	640
Tensile strength (N/mm²)	700
E-modulus (mPa)	210,000
Elongation at break (%)	<6

Composition (in % of mass)	
Cobalt	62.2
Chrome	30
Molybdenum	5.5
Silicone	1.0
Manganese	0.6
Carbon	0.6
Others	0.1



The high e-modulus permits production of delicate brace prostheses.



Easy shaping of brealloy MO facilitates the production of attachments.



Individual bars can be produced to fit perfectly.

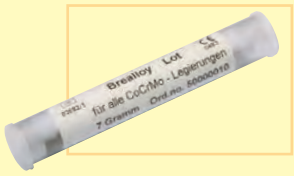
Accessories:

Brealloy solder	**Brealloy flux**
7 g	8 g
REF 500 0001 0	**REF 500 0001 1**

bredent group

Telephone (+49) 0 73 09 / 8 72-4 40

Brealloy solder



Brealloy solder
7 g
REF 500 0001 0

Solder especially matched with CoCr alloys for chrome cobalt and ceramic bonding techniques to avoid the formation of galvanic elements and undesired reciprocal action with the ceramic material.

Brealloy flux



Brealloy flux
8 g
REF 500 0001 1

Suitable for all CoCr alloys,
supports the flow characteristics of the solder.

Duro-Top



Duro-Top
1000 ml
REF 570 0005 4

Immersion hardener for precise and clean modelling on duplicate model surfaces.

For the agar duplicating technique



Immersion hardening liquid especially for agar duplicating - for sealing model surfaces.

Stabilization of edges



Thin edges and filigree areas withstand increased stress due to the immersion process.

Surface smoothing



Prefabricated wax elements adhere to the smooth model surface without using any adhesive.

Excellent diffusion



Due to the low-viscous consistency the hardener easily penetrates into the surface.

High yield



Excellent hardening effect and robust models are obtained even after numerous immersion processes.

Investment hardener



Improves the hardness and surface texture of all models duplicated in silicone.

Investment hardener
500 ml
REF 550 0000 4



The improved strength toughens the edges and prevents damage to the fine wax-coated margins.



The greater scratch resistance allows waxing up without damaging the model surface.

Crepe sleeve



Crepe sleeve
25 m
REF 570 0002 1

For individual overbedding of CoCr work.

- Surface enlargement
- Uniform absorption and release of heat
- Investment material is saved



Investment marker



Helps with the positive identification of investment muffles.

Investment marker
REF 330 0115 0



The necessary information is noted down quickly and easily.



The marker can be clearly read on all investment materials up to 1100° C.

Sprue

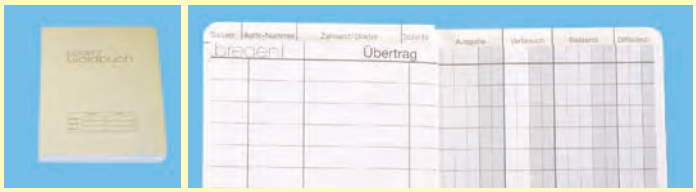


Sprue
made of high-quality plastic
25 pieces
REF 360 0002 5



Specially shaped sprue for CoCr work. Made of high-quality plastic for extended durability. Compared to the shape of conventional sprues, this shape improves the filling behavior.

Golden booklet



Golden booklet
DIN A 6
REF 610 0020 0

Thanks to the clear and simple structure of the golden booklet, reliable stock-keeping of precious metal alloys is ensured. The booklet simplifies the control and provides a quick survey on the consumption of alloys.



Golden booklet
DIN A 4
REF 610 0010 0

Implementing the repeatable solution in your lab!

Competent practical advice and adjustment of equipment by our Special System Consultant – for your immediate success.

- Course content is adapted to daily cases in your lab
- Up to three participating technicians without any fee – that's worth it!
- Taking place at your lab – saves you money
- Cost effective and prompt on site converting into the new system
- Course content is adapted to individual requirements of each lab

Content of Workshop:
The Special System Consultant checks and adjusts all corresponding materials and machinery. This means you can achieve reproducible results straight after the course.
On the course a secondary crown is made on a primary one you have prepared prior to the training. After casting the secondary construction is easily fitted on to the primary one.

Duration of Workshop:
Duration of this workshop is one day. Whilst this beneficial action takes place, lab business can go on as usual. Multiple technicians can participate without extra fees.

Workshop order number:
The „Precision Casting" workshop can be ordered under REF 950 0074 0.
The specially trained System Consultants then will meet you at your lab by appointment.

Book an individual appointment for this informative and beneficial workshop.

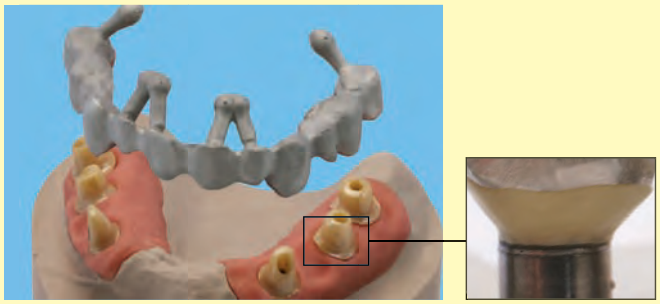


Photo: DL Marco Zelmer, Sondershausen

Highest precision and perfect fit of the denture due to the manufacturing process. By avoiding galvanic caps space is gained for esthetic veneering – minimizing costs.

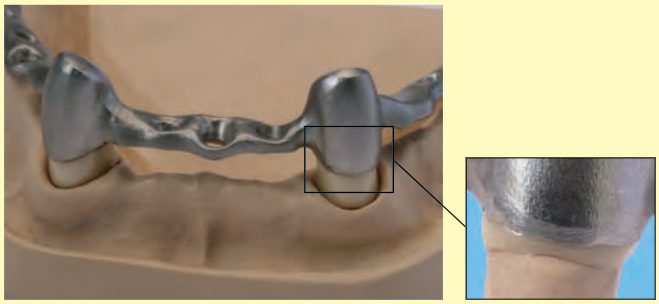


Photo: DL René Thiere, Gera

Durable dental restorations requiring no maintenance such as fixing the loss of friction. This saves the patient's money.

Milling unit BF 2

Precision guides ensure perfect milling and drilling

exact drillholes thanks to bit stop

- very smooth, vibration-free running
- excellent truth

precision guides ensure long service life

perfect lighting of the working area with the integrated halogen lamp

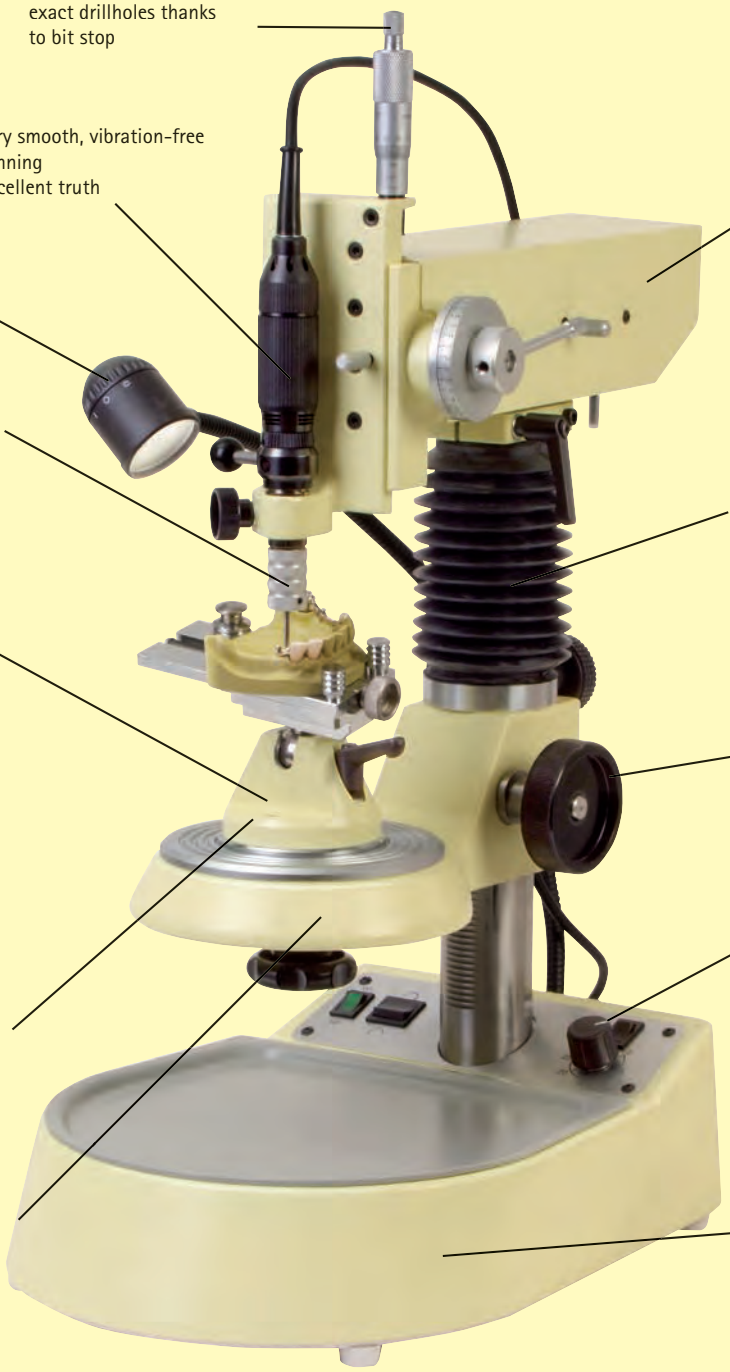
rapid exchange of burs ensured by quick-stop

rigid construction made of high-quality aluminium alloy and stainless chromium steel

model support locks in horizontal position, turning range of up to 90°

easy and precise adjustment of height

clearly-arranged control panel for quick access and selecting speed, clockwise/anticlockwise rotation and lighting



fast and reliable model table chuck mechanism for precise working

height-adjustable milling table

- constant working and viewing height
- ergonomically designed milling table allows non-tiring working

stable plastic tray ensures clean working place during milling

Milling unit BF 2
including 1 Model support BF 2
1 piece

REF 140 0098 0

Technical Data

Power supply	230 Volt / 50/60 Hz
Power rating	80 Watt
Speed	0 - 30,000 U/min.
Chuck	Ø 2.35 mm
Fuse	thermal overload protection
Torque	2.6 Ncm
Weight	18 kg
Width/Depth/Height	250 x 370 x 510 mm

Accessories:

Chuck 2.35 mm	**REF 730 0016 9**
Chuck 3 mm	**REF 730 0015 3**
Tap handwheel	**REF 330 0115 4**
Model support BF 2	**REF 730 0017 0**
Milling base	**REF 140 0089 3**
Adapter airaqua turbine	
16 mm	**REF 730 0018 4**
18 mm (for BF1)	**REF 730 0018 3**
28,5 mm	**REF 730 0018 5**
Transfer device	
3 mm shaft	**REF 360 0116 3**
2.5 mm shaft	**REF 360 0126 5**

Milling base



Milling base with integrated thread for fixation on the milling base of the BF 1 unit. Additionally, plaster is removed completely and without damaging the metal plate by slightly turning the locking bolt.

Milling base
1 piece
REF 140 0089 3



Model support BF 2



The model support can be used for all milling units including units with magnetic circuit. Turning by 90° permits to perform lateral drilling of bars without removing the model.

Model support BF 2
1 piece
REF 730 0017 0



Transfer device



Permits correct transfer of the position of the model to the milling base. Up to 8 units can be transferred at the same time.

Transfer device
3 mm shaft
REF 360 0116 3

2,35 mm shaft
REF 360 0126 5

Brenometer surveying system



Brenometer surveying system

Four different surveying plates according to Ney allow accurate positioning of the clasp profiles whilst ensuring correct depth of undercuts. A locating pin and a red marker with a holder ensure correct surveying.



Marking the clasps and surveying with a single unit – this is how time and money can be saved.

Assortment

1 Brenometer marker holder
1 Brenometer locating pin
1 Brenometer plate 0.25
1 Brenometer plate 0.35
1 Brenometer plate 0.50
1 Brenometer plate 0.75

REF 310 0000 2

Refill packages:

Brenometer marker holder	**REF 310 0000 4**
Brenometer locating pin	**REF 310 0000 3**
Brenometer plate 0.25	**REF 310 0002 5**
Brenometer plate 0.35	**REF 310 0003 5**
Brenometer plate 0.50	**REF 310 0005 0**
Brenometer plate 0.75	**REF 310 0007 5**

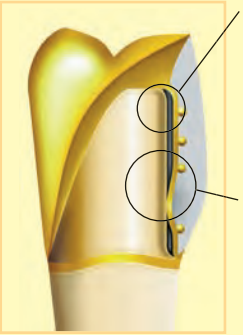
Activating pliers



Save telescopic units.

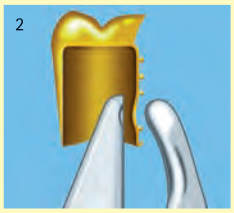
bredent
Activating pliers
REF 320 0043 0

Provide conical and telescopic crowns with "new" friction easily and quickly.



The problem:
Conical and telescopic crowns have lost their friction.

The solution:
Activating pliers - Pliers which recreate the retentive forces for telescopes which have lost their function.



The friction zones in the outer coping create 3 new contact areas between the inner and outer copings. This restores the retentive friction. Should the unit be activated too much, the surface can be trimmed to reduce the friction.

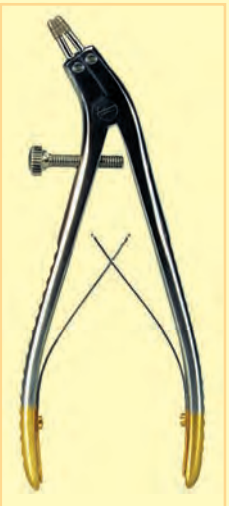


These pliers have a ball and socket for creating one or several new friction zones. The long lever of the pliers enables the forces to be applied as required.



The activating pliers can also be used to reduce a friction zone which is too retentive. If necessary, the facing should be removed for activating the unit and replaced again later.

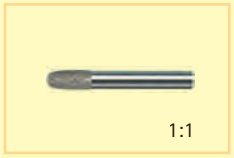
Novo-Grip



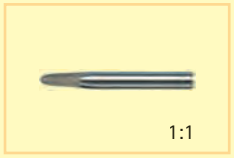
Sharpenable, sintered diamond coated inserts for conical pliers with „grip".

Novo-Grip pliers
1 pair of pliers
+ 2 standard inserts
+ 1 Allen key
REF 310 0000 8

Novo-Grip pliers
1 pair of pliers
+ 2 small inserts
+ 1 Allen key
REF 310 0011 3



Novo-Grip
standard insert
2 pieces
REF 310 0001 A



Novo-Grip
small insert
2 pieces
REF 310 0001 B

Accessories:



Diabolo cleaner
grindstone
for inserts
1 piece
REF 340 0100 0

Set screws M3
4 pieces
REF 310 0011 2

Different sizes



Exchangeable insert with a diameter of 2.35 mm, also for small primary crowns.

Special shafts



Hardened shafts provide high stability even if strong pressure is exerted.

Rotatable



Worne inserts can be rotated. New diamond grains ensure that inner surfaces of crowns can be held safely again.

Sharpenable



To regain the maximum abrasiveness, the inserts are clamped into the handpiece and new diamond grains are obtained on the surface using the grindstone.

Friction fit system FGP



Individual friction for highest demands.
The friction fit system offers the dentist and the dental technician an entirely new perspective during the preparation and the restoration of the friction for all types of telescopic metal restorations. Long service life and simple, time-saving processing render the friction fit system a comfortable solution for your patients.

Application fields of the FGP system



Safety and outstanding quality

The FGP system by bredent offers optimum and individual friction when preparing new conical and telescopic restorations.



Direct solution
instead of extended waiting times

Due to the use of FGP directly in the dental practice. The simple use during the restoration of the friction of telescopic work is the solution for the dentist and the patient.



Individuality and precision

These requirements can still be fulfilled even in areas difficult to access, whether new dental supply or relining work are concerned.



No compromises

During the preparation of new individual attachments. The FGP system allows to obtain results that fulfill highest demands.

20 years of experience with the FGP

Discover the personal advantages:

- **Saving of time due to fast and simple preparation**
- **Preparation of individual friction at favourable costs**
- **No fitting of secondary elements**
- **Long service life**
- **Maximum comfort of wear for the patients**
- **Allows low-cost single-piece casting**
- **Can be processed in the mouth**
- **Almost without any wear**
- **Low susceptibility to plaque thanks to highly compacted resin surface**

Up until today these advantages have contributed in more than 50,000 cases to achieving soft integration and removal of the denture.
The principle of the FGP resin is based on the fact that the metal fit that has been common in the telescopic technique so far will now be replaced by a metal-resin fit.
The metal-resin fit offers the benefit of a considerably more favourable coefficient of friction than the one of a pure metal fit. Consequently, increased resistance to wear and extended service life are obtained.

Friction fit system FGP

New fabrication of telescopic crowns


1

Thermo-forming or immersion wax copings serve as spacer for the FGP resin.


2

with a wall thickness of at least 0.2 mm ending 1 mm above the cervical margin.


3

The investment material model with cervical step is prepared before


4

the usual outer telescopic and cast pattern.


5

After casting – made with any alloy -


6

the cast frame is finished and veneered with resin or ceramic materials.


7

Due to the preparation during the modellation a gap resulted which is now filled with FGP.



8

In a preparatory step the pattern is insulated.


9

FGP bonding agent is applied equally thinly onto the inner surfaces.


10

The material is hardened at air for 5 minutes; during this time a visible layer is obtained.


11

The FGP two-component resin is mixed in the ratio of 1 : 1


12

and filled into the outer telescopes without any bubbles.


13

The restoration is placed onto the model exerting uniform pressure.


14

The hardened FGP resin with a clearly visible border at the cervical margin.


15

The FGP system offers individual friction with maximum comfort of wear.

The enhanced friction

Tests and scanning electron microscope studies with FGP reveal clearly better values of friction than those of metal fits.



Conventional metal/ metal fit.
Metal fit after completion adjusted to a frictional force of 8 Newton.



FGP resin/metal fit.
Resin fit after completion adjusted to a frictional force of 8 Newton.

For this comparison between a classical metal fit and a FGP fit 21,000 integration and removal processes were simulated. This corresponds to a period of wear of approx. 20 years.



Scanning electron microscope picture of the inner side of a telescopic secondary element made of a precious metal alloys with a magnification x 100.



Scanning electron microscope picture of the inner side of a telescopic secondary element made of FGP resin with a magnification x 100.

Result: Residual friction 2 Newton, that is only 25 %.

Result: Residual friction 6 Newton, that is still 75 %.

bredent group

Friction fit system FGP

Restoration in case of loss of friction


1

Telescopic work after numerous years of wearing.


2

During the integration there is no sufficient friction.


3

Primary telescopes in situ prior to friction relining.


4

The dial caliper is used to measure the thickness of the outer telescopes.


5

The outer parts are ground to obtain space for the FGP resin.


6

Any residual grinding particles are removed with compressed air.


7

Retraction threads are put around the primary elements.


8

Then the inner telescopes are insulated with a small amount of liquid vaseline.


9

FGP bonding agent is applied equally thinly onto the inner surface of the outer parts.


10

The FGP two-component resin is mixed in the ratio of 1 : 1


11

and filled into the outer telescopes without any bubbles.


12

After the denture has been integrated, the patient is able to bite evenly exerting normal masticatory pressure.


13

The resin residues must be removed with the probe. Approx. 120 seconds after beginning of mixing, remove the restoration from the primary elements and place it on again.


14

The denture is removed after approx. 7 minutes and excess material is removed with a rotating tool.

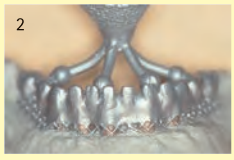

15

The result is a functional denture that exhibits excellent comfort of wear within a very short period.

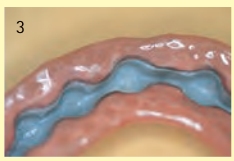
FGP in implantology
Absolutely tension-free fit.


1

The excellent sliding properties of FGP resin ensure gentle, implant-protecting integration and removal of the supraconstructions.


2

Even very small tensions in the low-cost and biocompatible single-piece casting process are perfectly compensated.


3

The high resistance to abrasion and non-tilting integrating and removing of the supraconstruction provide patients with a high comfort of wear and simple handling of their dentures.


4

The friction with FGP resin that will remain stable over many years guarantees the patients' happiness and satisfaction.

Assortment

Friction fit system FGP

REF 540 0102 8

1 x 2.5 g Friction resin component A
1 x 2.5 g Friction resin component B
1 x 1.25 ml FGP bonding agent
1 x 3.0 ml FGP insulating agent
1 Spatula
5 Brushes
1 Brush holder
1 Mixing block



Refill packages:

Friction resin component A	**REF 540 0108 A**
Friction resin component B	**REF 540 0108 B**
FGP bonding agent	**REF 540 0102 6**
FGP insulating agent	**REF 540 0102 7**

Accessories:

Mixing block		
35 x 50 x 10 mm	10 pieces	**REF 330 0114 4**
Disposable brushes	100 pieces	**REF 330 0114 2**
Spatula	100 pieces	**REF 330 0114 3**
Brush holder, bent	12 pieces	**REF 330 0114 1**
Application cannulas, black	25 pieces	**REF 580 0001 8**

INNOVATIONS



For almost 40 years, bredent has offered innovative solutions for use in the dental technology laboratory – this is a central part of the company's philosophy.

New developments and procedural techniques will significantly influence the future of dental technology and dentistry.

Due to close contact with customers and monitoring of national and international dental markets, ideas and recommendations influence modifications in the product portfolio. This exchange enables the processes in the laboratory and in the practice to be optimised and costs to be reduced.

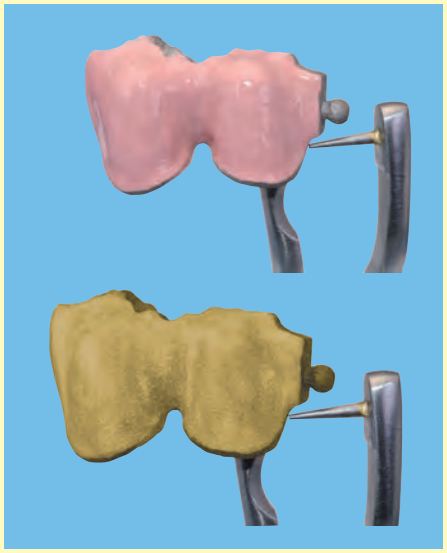
bredent strive for and desire consistent implementation of the quality standards in accordance with ISO 9001, which offers the user maximum product safety and, as a result, ensures patients receive implant prosthetic restoration of the highest quality.

Efficient through innovation!

Deutsche Dental Industrie

bredent group

The proven bonder system for NPM alloys balances the CTE value and hence avoids chipping of the ceramic veneer. More innovative products from bredent, such as liquids or instruments, contribute to simple processing in the field of ceramics.



Ceram-Bond can be easily applied and the components ensure perfect coverage of the framework. After firing, a golden-yellow coat is formed on the framework, which avoids chipping of the ceramic.



Accurate dosing of the ceramic powder enables perfect reproduction of shades. Shrinkage during firing is reduced by mixing the ceramic powder with the ceramic mixing liquid. As a result, time is saved during processing.



The ceramic brushes with black hair provide good contrast to the ceramic material and enable fatigue-free working.



The ceramic processing set that includes several perfectly matched components facilitates surface finishing and reduces the amount of working time needed.

Chrom-Kobalt-Bonding ... 270
Ceram-Bond ... 270
Opaquer mixing liquid ... 271
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Chrom-Kobalt-Bonding



Chrom-Kobalt-Bonding
4,5 g
REF 520 0032 1
19 g
REF 520 0032 0

The microfine layer of bonding material ensures a perfect bond between the porcelain and chrome cobalt, fully compensating for differences in their thermal coefficients of expansion.
Reduces the problems for alloys with strong tendency to oxide layer formation.
The micro-fine intermediate layer that is fired at 980 °C allows to balance the CTE values of the chrome cobalt alloy and the ceramic material.
Chrome Cobalt Bonding protects against spalling and avoids time-consuming remakes. In cases of unfavorable space conditions, CCB allows to fire the ceramic material directly on the CoCr structure.

Ceram-Bond







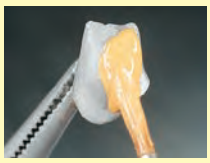
Ceram-Bond
30 g
REF 520 0032 2
7 g
REF 520 0032 3

For increased reliability with all alloys.
The premixed, ready-to-use Ceram-Bond allows to omit oxide firing when veneering metal frameworks.
Ceram-Bond is applied immediately after finishing, sandblasting and cleaning the metal framework.
This micro-fine layer improves bonding of the ceramic material to the metal framework, protects against spalling and offers increased reliability.

Opaquer mixing liquid

Opaquer mixing liquid
18 ml
REF 520 0085 0
200 ml
REF 520 0012 2

For enhanced wetting and perfect flow characteristics.





Developed and tested by leading ceramists.

Tip:
Adding a few drops of opaquer liquid to porcelain mixed with mixing liquid prolongs its working time and facilitates building-up of large-size restorations.

Porcelain mixing liquid

Porcelain mixing liquid
30 ml
REF 520 0086 0
200 ml
REF 520 0012 3

- Much less shrinkage thanks to improved condensing properties
- Prevents occlusal and interdental contraction cracks in the porcelain
- Easier to condense





Tip:
Mix the porcelain slightly thinner; to obtain the ideal consistency leave it for 2 minutes. If building-up takes a long time, spatulate the mixture from time to time; if necessary add a few drops of porcelain mixing liquid because the porcelain already begins to condense on the mixing slab.

Stain liquid

Stain liquid
7 ml
REF 520 0084 0
30 ml
REF 520 0012 1

- Provides for an absolutely even glaze
- Holds the stains in place perfectly on porcelain
- Thanks to a new formula, this stain liquid can be used for inlay in stains





Porcelain liquid set

Porcelain liquid set
for testing and comparing

30 ml Porcelain mixing liquid
18 ml Opaquer mixing liquid
7 ml Stain liquid
REF 520 0087 0



Ceramic separating set



Plaster sealing liquid gvs
20 ml
REF 520 0012 9

For separating ceramic materials against plaster.
- Extremely thin separating film provides outstanding separating effect
- Suitable for all commercial ceramic materials (also low-melting) thanks to optimal composition
- Harmonized components avoid discoloration of the ceramic materials



Apply plaster sealing liquid onto the areas to be separated so that a homogeneous, smooth surface is obtained



Brush plaster sealing liquid also onto approximal areas. Let the plaster sealing liquid dry for 2 minutes.



Ceramic separating liquid kis
20 ml
REF 540 0070 3



Apply ceramic separating liquid onto the plaster model so that a wet, shining layer is obtained.



Ceramic separating liquid also applied onto the approximal contacts. The model must not be dried with compressed air.



Ceramic materials are layered directly on the wet ceramic separating liquid.



The special composition of the ceramic separating liquid avoids discoloration of the ceramic materials.



Thinner for ceramic separating liquid
20 ml
REF 550 0000 3



Remove the ceramic structure carefully from the plaster model.

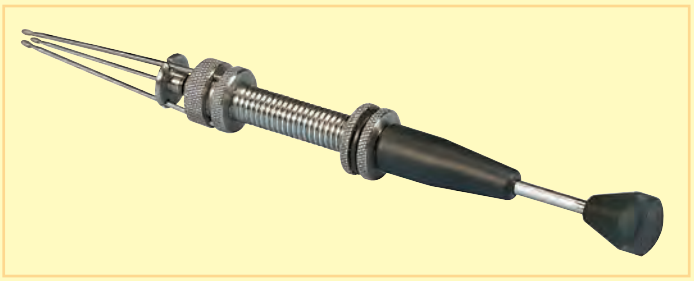


The ceramic separating liquid provides absolute reliability when producing the model. Spalling of ceramic is avoided; accordingly considerable time can be saved.

Assortment

20 ml Plaster sealing liquid gvs
20 ml Ceramic separating liquid kis
REF 520 0100 0

Quicktool



Ceramic structures are held safely without any pressure thanks to the three galvano plated diamond tips and the locking mechanism – even galvano formed copings.



Quicktool
REF 310 0102 0

The three bud-shaped diamond tips ensure safe and uniform hold of the crown. Accordingly, safe hold is achieved also when condensing.

Accessories:



diamond tips
3 pieces
REF 310 0102 1



The gripping force can be adjusted to the crown size without deforming the crown.

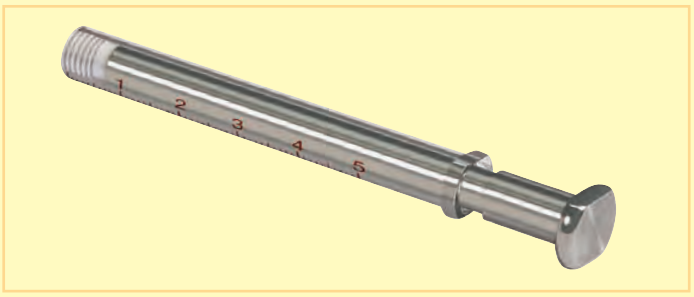


In case of limited space, a diamond tip can be removed - ideal for lower anterior crowns.



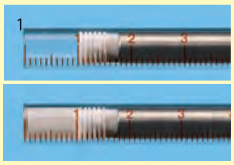
The integrated condenser condenses the ceramic material in next to no time.

Ceramix

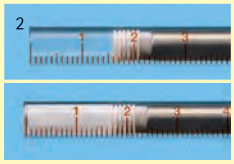


Reproducing individual shade mixtures quickly and easily. Ceramic material is saved thanks to controlled dosing.

Ceramix
REF 360 0119 5



The desired quantity is determined using the scale and the Ceramix is inserted into the ceramic material.

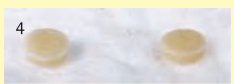


The corresponding filling quantity is determined for additional ceramic materials.



When inserting the Ceramix into the ceramic material, it must be ensured that the material is properly condensed.

To obtain the same shade mixture continuously, note down the ratio of the mixed shades. This way ceramic material is saved.



To obtain individual sample shade tabs, stir the mixed ceramic material thoroughly with a spatula. Take up with the Ceramix, press onto the fibrous pad, wet and fire.

MagicContrast



MagicContrast – black hair
Fatigue-free working thanks to perfect contrast between ceramic material and brush hair.

The synthetic hair provides lasting springiness.

The „transformers" among the brushes which obtain their original pointed shape after they have been washed out or by vibrating them lightly.

Product name	Size	Qty.	REF
MagicContrast	4, 6, 8	1 piece each	390 CSET 1
MagicContrast	1	2 pieces	390 C001 0
MagicContrast	2	2 pieces	390 C002 0
MagicContrast	4	2 pieces	390 C004 0
MagicContrast	6	1 piece	390 C006 0
MagicContrast	8	1 piece	390 C008 0
MagicContrastBigBrush	8 BigBrush	1 piece	390 C008 B
MagicContrast	1/0	2 pieces	390 CS01 0
MagicContrast-Opaker	5	2 pieces	390 CS03 0



Scale 1:1

MagicBrush



MagicBrush – golden brown hair

High springiness of durable synthetic hair for simpler layering of the ceramic material. MagicBrush and MagicContrast only differ by the color of the hair.

Restore the original pointed shape by tapping off or vibrating the brush lightly, just like with the MagicContrast brushes.

Product name	Size	Qty.	REF
MagicBrush	4,6,8	1 piece each	390 MSET 1
MagicPaintBrush	00 000	1 piece each	390 MS23 0
MagicBrush	1	2 pieces	390 M001 0
MagicBrush	2	2 pieces	390 M002 0
MagicBrush	4	2 pieces	390 M004 0
MagicBrush	6	1 piece	390 M006 0
MagicBrush	8	1 piece	390 M008 0
MagicBigBrush	8 BigBrush	1 piece	390 M008 B
MagicBrush	1/0	2 pieces	390 MS01 0
MagicBrush	2/0	2 pieces	390 MS02 0
MagicBrush-Opaker	5	2 pieces	390 MS03 0



Scale 1:1

Magic...



The MagicContrast brushes = black and MagicBrush = brown feature absolutely identical functional chacteristics!

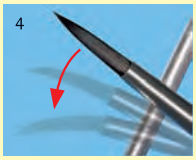


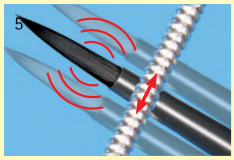
The pointed shape of dry brush hair is immediately restored by wetting, tapping off or vibrating the brush lightly.



Thanks to the strong contrast, any contamination such as dust or dry ceramic particles can be clearly recognized.







From the spatula shape to the original shape by rinsing the brush in liquid and then tapping if off or vibrating it lightly with a suitable instrument.



High elasticity to pick up specific quantities of ceramic material more easily.



The optimized springiness restores the shape of the brush tip immediately after picking up ceramic material. Additionally, the respective quantity can be easily assessed thanks to the contrast.



The spatula shape can be easily achieved after pressing the tip with two fingers. This way, the brush can be shaped individually.



Large quantities of ceramic material are picked up and time-saving layering is achieved thanks to the elasticity and the springiness of the brush hair.



The spatula shape does not reduce the stability of the brush hair; hence less time is required for applying the ceramic material to the framework.

KoliBrush



KoliBrush – golden brown natural hair
Natural hair brushes made of superior quality Kolinsky hair.



Improved design of the tip of the BigBrush is achieved tanks to the integrated spheres - for simpler modelling. Fine, stable tip thanks to carefully selected hair.



The shape and quality of the hair for perfect retention of moisture and improved adhesion and application of ceramic material.

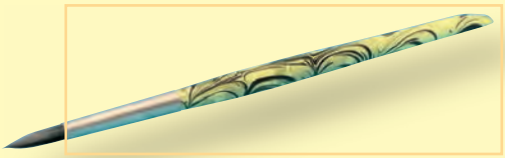


The desired elasticity is obtained by the unique design and combination. This way already applied ceramic layers will not be damaged.

Scale 1:1

Product name	Size	Qty.	REF
KoliBrush	4, 6, 8 B	1 piece each	390 KSET 1
KoliBrush	1	2 pieces	390 K001 0
KoliBrush	2	2 pieces	390 K002 0
KoliBrush	4	2 pieces	390 K004 0
KoliBrush	6	1 piece	390 K006 0
KoliBrush	8	1 piece	390 K008 0
KoliBigBrush	8 BigBrush	1 piece	390 K008 B
KoliBrush	1/0	2 pieces	390 KS01 0
KoliOpakerBrush	5	2 pieces	390 KS03 0

Unique Brush



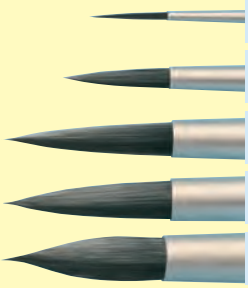
Ceramic processing „par excellence".
Unique Brush – the truly esthetic brush.

With newly developed matt black bristles and unique design of each brush – even more benefits when processing ceramic materials.

- Perfectly shaped brush tips enables accurate placement of the precious ceramic materials
- Superior retention of moisture for prolonged modelling
- High elasticity of the brush hair so that large quantities of ceramic material can be picked up
- Spatula function for layering small gaps
- Individual color of each brush renders the tool unique
- Ergonomic shape enables fatigue-free working

The brushes are available in the assortment (in an attractive case) or individually.

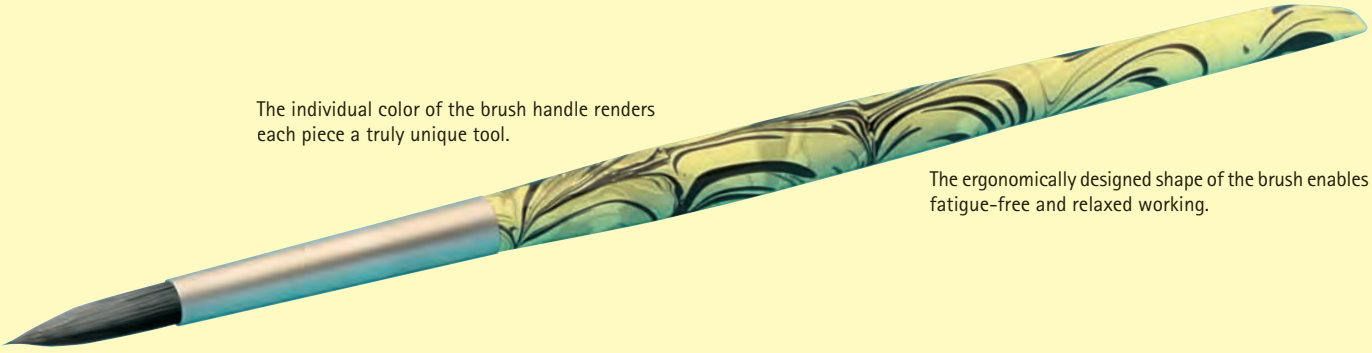
Scale 1:1

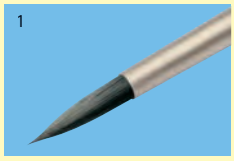


Product name	Size	VPE	REF
Unique Brush Set	1, 4, 6, 8	1 piece each	390 USET 1
Unique Brush	1	1 piece	390 U001 0
Unique Brush	4	1 piece	390 U004 0
Unique Brush	6	1 piece	390 U006 0
Unique Brush	8	1 piece	390 U008 0
Unique Brush	BigBrush	1 piece	390 U008 B

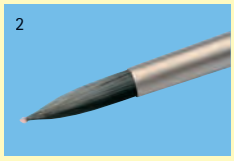
The individual color of the brush handle renders each piece a truly unique tool.

The ergonomically designed shape of the brush enables fatigue-free and relaxed working.





The newly developed, matt black brush hair with extremely high elasticity and excellent retention of the mixing liquid ensures prolonged modelling.



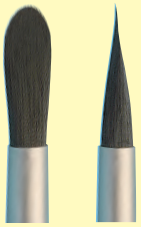
The application-oriented shape of the brush tip enables accurate placement of the precious ceramic material. The contrast between the brush hair and the ceramic material ensures simple determination of the quantity that has been taken up.



The optimized, high elasticity of the newly developed brush hair allows also to take up large quantities of ceramic materials.



The required new shape and function are easily achieved by pressing the brush tip together with the fingers.



The spatula shape allows to build up very small interdental spaces and to separate them. It renders the brush a perfect tool for the preparation of marginal ridges.



The spatula function of the brush allows to apply ceramic material very accurately and to smoothen large areas. As a result, time during finishing is saved after firing.



The perfectly shaped brush tip is restored by rinsing the tip with water and then tapping off or vibrating it gently with a suitable instrument.

Brush holder



The ingenious storage tool for brushes and instruments.

- High stability
- Stores up to 14 brushes and instruments
- Soft silicone for safe hold
- No restrictions to sizes
- Prolonging the service life of brushes thanks to perfect storage
- Residual substances (for example ceramic materials) will not reach the area of the collars of the brushes
- No damage to sensitive working sections of instruments
- No risk of injuries caused by pointed or sharp instrument inserts

Stainless steel holder (approx. 600 g) with silicone storage rack to hold and store ceramic brushes and instruments in a perfect manner. The size of the 14 clip openings ensures proper fixation of most ceramic brushes. All brushes will be safely held in the ideal section, which may be the section of the handle or the collar as well. As a result, the brushes are not aligned on a single level but arbitrarily and better handling is ensured. On both sides there is a central opening with a larger diameter to hold brushes with large diameter handles.

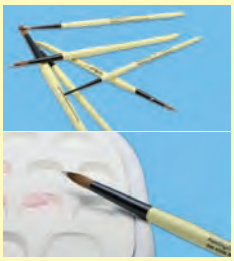
Brush holder
1 piece
REF 310 0102 9



Two diameters for all brush sizes.



Soft, flexible silicone



Improper storage



Holder with brushes / instruments in different sizes - depending on the diameter brushes / instruments are clipped in the area of the handle or the collar. The resulting differences in height (not aligned on one level) allows perfect access. Sensitive instruments can also be fastened in the brush holder!

Mixing plates



Perfectly shaped

Mixing plates „Form follows function"
The fanciful mixing plates from bredent. Featuring new shapes and an exquisite design which reflects the uniqueness. Perfectly shaped, individual, functional and unconventional – they add a personal touch to your working place. Created for mixing ceramics, light-curing materials and stains.

Individuell

Ceramico GlossOne

GlossOne glazed mixing plates are not self-wetting systems. A special seal has been adhered into the lid.
The lid protects the content from drying too quickly and from becoming contaminated. Wet and clean the seal, exert pressure onto the central section of the correctly positioned lid and the air is displaced. The resilience of the lid creates a slight vacuum. The lid adheres to the plate and hence an airtight seal is obtained.



Ceramico GlossOne3
White-glazed mixing plate in the shape of an incisor with three indentations and plastic lid with special seal.

3 indentations (approx. 30 x 20 x 4.5 mm)
Dimensions - plate: approx. 190 x 144 x 15 mm
Dimensions - lid: approx. 192 x 148 x 18.5 mm
Weight: approx. 510 g
REF 390 0040 0



Ceramico GlossOne14
White-glazed mixing plate in the shape of an incisor with 14 indentations and plastic lid with special seal.

3 indentations (approx. 43 x 30 x 5 mm)
4 indentations (approx. 33 x 22 x 4.5 mm)
7 indentations (approx. 29 x 20 x 4.5 mm)
Dimensions - plate: approx. 190 x 144 x 15 mm
Dimensions - lid: approx. 192 x 148 x 18.5 mm
Weight: approx. 460 g
REF 390 0040 11



The glazed surfaces allow to apply individual markings which can be wiped off with a finger or a cloth if necessary.





When interrupting the working process, the plate can be covered to protect the ceramic from becoming contaminated. A seal has been integrated into the lid.



After exerting pressure onto the lid, excess air will escape and a tight seal is obtained to ensure that the ceramic material will dry less quickly. How long the necessary consistency of the ceramic material can be maintained, depends on the time of coverage, the ambient temperature and exposure to sunlight, which must be avoided.





Mixing plates

Ceramico WetOne

The porosity within the plates allows to achieve necessary wetting to maintain the desired consistency of the ceramic materials. Moreover the smooth surface protects bristles against rapid wear. When storing in the closed container and constantly checking the degree of wetness, the ceramic material can be stored almost for an indefinite period and material consumption is reduced considerably. Moreover time is saved since it is not required to keep ceramic materials permanently wet and additional costs for fleece, filters, etc. can be reduced. When closing the lid during interruptions of work, ceramic materials will not dry and become contaminated.



Ceramico WetOne3
Self-wetting mixing plate in the shape of an incisor made of absorptive special ceramic with 3 indentations in the plastic container.

3 indentations
(approx. 30 x 20 x 4.5 mm)
Dimensions - plate:
approx. 190 x 144 x 13 mm
Dimensions - container:
approx. 192 x 146 x 25 mm
Weight: approx. 580 g
REF 390 0040 2



Ceramico WetOne14
Self-wetting mixing plate in the shape of an incisor made of absorptive special ceramic with 14 indentations in the plastic container.

3 indentations
(approx. 43 x 30 x 5 mm)
4 indentations
(approx. 33 x 22 x 4.5 mm)
7 indentations
(approx. 29 x 20 x 4.5 mm)
Dimensions - plate:
approx. 190 x 144 x 13 mm
Dimensions - container:
approx. 192 x 146 x 25 mm
Weight: approx. 530 g
REF 390 0040 3

Funktional thanks to prolonged processing consistency

The photos below show how moisture is withdrawn from the mixing plate by the ceramic material and the material takes on a darker shade. If the brush is pressed lightly into the material, the moisture level is increased and the material can be perfecttly taken up for further processing.



Use a soft brush to clean the plates under running water. Alternatively, a steam blasting unit can be used. Better cleaning results can be achieved by treatment of the previously dried plate in the preheating furnace. The plate should be supported on firing trays and slowly heated up to 100 to 150° C; the temperature should be maintained for 1 hour. Then the plate is slowly heated up to 800° C. Finally, the furnace is turned off and the plate is slowly cooled down.

If necessary, finish the surface with waterproof abrasive paper and clean once more under running water.

Attention! If the plate is heated and cooled too quickly, a temperature shock – and consequently fracture – may result.

Unconventional

Ceramico BlackMolar and ColorImplant

„Form follows function" - this is part of a famous slogan created by Louis Sullivan, the American architect and main representative of the Chicago School, one of the first leading-edge high-rise architects. The unconventional and unique shapes of Ceramico BlackMolar and ColorImplant are to set new trends for laboratory routines of dental technicians and to appreciate their „works of art".



Ceramico BlackMolar
Black-glazed mixing plate in the shape of a molar with overglazed nerve canals and a lid impenetrable to UV light for mixing light-curing materials.

5 indentations
(approx. 17 x 12 x 2.5 mm)
1 indentation
(approx. 30 x 22 x 4.5 mm)
Dimensions - plate:
approx. 210 x 115 x 11 mm
Dimensions - lid:
approx. 210 x 117 x 17 mm
Weight: approx. 300 g
REF 390 0040 4



Ceramico ColorImplant
White-glazed mixing plate in the shape of an implant with 13 indentations and dust lid, for stains.

1 indentation
(approx. 42 x 23 x 4.5 mm)
12 indentations
(approx. 14 x 9 x 3 mm)
Dimensions - plate:
approx. 170 x 67 x 12 mm
Dimensions - lid:
approx. 172 x 69 x 16 mm
Weight:
approx. 190 g
REF 390 0040 5

breCeram



From shaping to a high polish – finely tuned processing set,
for the ceramics specialist

- inverted cone with relief grinding technology for smooth surfaces
- fine but abrasive diamond grinder
- two different abrasion stages of the Abraso-Fix-Roundbrushes permit rapid polishing, as the polish paste is already carried in the bristles
- Ceragum coarse is suitable for use with ceramic and for rubberized metal
- Cerafine adds a very high gloss to ceramic and metal very quickly



The diamond grinder is used for coarse processing of ceramic. But nevertheless a fine surface is achieved thanks to the fine diamonds.



The inverted cone is ideally suited for shaping of the occlusal surfaces. Simultaneously the undercut produces a polished ceramic surface.



Ceragum coarse is a universal product. It removes material fast, leaving an optimal surface structure.



Abraso-Fix green is used to produce the coarse surface structure. It is also highly suitable for smoothing ceramic and metal occlusal surfaces.



Abraso-Fix red already achieves a light polish on the surface. It is used to give the first polish to ceramic and metal.



Cerafine is the high gloss polisher for ceramic and metal. It is particularly suitable for transition areas of metal to ceramic, as after glaze firing the metal polish no longer has a matting effect.



Fast and simple processing of ceramic and metal. breCeram offers the ideal combination.

Assortment

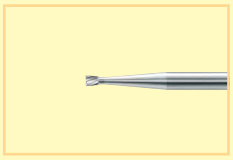
6 pieces



breCeram processing set for ceramics
1 diamond grinder fine
1 Tungsten carbide 1.2
1 Abraso-Fix green
1 Abraso-Fix red
1 Ceragum coarse, wheel
1 Cerafine, wheel
REF 520 2028 6



Diamond grinder fine
1 piece
REF 340 0107 1



Tungsten carbide
ISO-Nr.
500 104 010006 012
1 piece
REF H010 NH 12



Abraso-Fix green
2 pieces
REF 350 0059 0
8 pieces
REF 350 0075 5



Abraso-Fix red
2 pieces
REF 350 0060 0
8 pieces
REF 350 0075 3

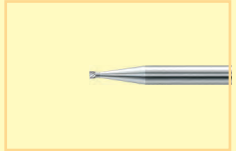


Ceragum coarse,
wheel not mounted
12 pieces
REF PRK G221 2
50 pieces
REF PRK G225 0
100 pieces
REF PRK G220 0

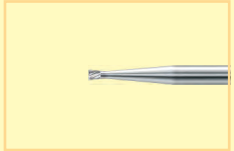


Cerafine, wheel
1 piece
REF 520 2028 5

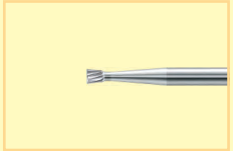
Accessories:



Tungsten carbide
ISO-No.
500 104 010006 008
1 piece
REF H010 NH 08



Tungsten carbide
ISO-No.
500 104 010006 010
1 piece
REF H010 NH 10



Tungsten carbide
ISO-No.
500 104 010006 016
1 piece
REF H010 NH 16

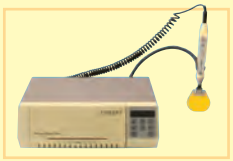
compoForm UV



compoForm UV
2 x 3 ml syringes
10 nozzles
REF 540 0115 0

Light curing resin from a syringe for time saving modelation of crown and bridge constructions, individual abutments and bars. Through immediate curing with a UV hand lamp or bre.lux handlamp a precise and clean application is achieved. This reduces corrections and saves time.

- pasty – non runny, for exaxt application
- stable – allows safe modeling to match the demands of profile milling
- low shrinkage – for high precision, custom made modelations.
- millable – for ease of trimming
- easy syringe application reduces modeling time



Asseccories:

Nozzles
25 pieces
REF 580 0001 8

bre.lux Power Unit
Kit
REF 140 0097 0



Pin-point application directly from a sysringe for quick and precise modeling.



Fast and simple – making individual abutments from compoForm UV.



compoForm UV easy trimmable with tungsten burs.

SERACOLL UV



SERACOLL UV
2 x 3 ml
2 dipping bowels
REF 540 0115 1



Asseccories:

bre.lux Power Unit
Kit
REF 140 0097 0

Light curing wax glue with high grade of capillary attraction means tension free constructions.

- safety by high stability
- speedy work flow by short curing time
- smooth surface of modelation equals smooth zircon surface
- high **capillary attraction** – safe joining of bridge segments
- shrinkage free – ideal for custom made constructions



Tension free, stable and safe joining of bridge segments for high precision modelations.



Gaples closure between bridge units through high capillary effect. More safety by applying this procedure.



SERACOLL UV smoothes the surface means smooth probe scanning of the structure.

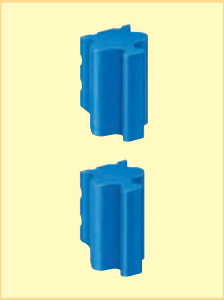
Vario-Soft 3 zircon sv



Vario-Soft 3 mini sv
females green
8 pieces
REF 430 0733 5

females yellow
8 pieces
REF 430 0733 3

females red
8 pieces
REF 430 0733 1



Vario-Soft 3 zircon sv
8-pieces pack
REF 430 0732 2

Vario-Soft 3 zircon sv mini sv
8-pieces pack
REF 430 0732 9

The approved attachment system Vario-Soft 3 is now also available for zircon. The joint and integrated stress compensator, especially designed for zircon specifications, clearly indicates Vario-Soft 3 zircon sv for combined denture work. Two sizes available for anterior and posterior areas allow application in low space regions

- approved attachment system with three grades of friction for gaining more individuality
- solid joints between attachment and crown for more safety
- individually reduceable for low vertical space regions



Joining the components with compoForm UV Completion of the joint with SERACOLL UV to be light cured.



Mirror polishing of the attachment after sintering with *Zi*-polish. The secondary framework to be processed as usual.

Asseccories:

Parallel holder universal
REF 360 0115 1

5-motions-zircon



For denture applications, the cleanliness of the material ranks first and foremost.
Bi-axial pressed zircon for a steady quality – cross-charge. Different sizes offer full flexibility and high efficiency.



5-motions-zircon
zircon blanks small
6/16, 16 mm height
3 pieces
REF 360 1061 6
6/20, 20 mm height
3 pieces
REF 360 1062 0



5-motions-zircon
zircon blanks large
14/16, 16 mm height
1 piece
REF 360 1141 6
14/20, 20 mm height
1 piece
REF 360 1142 0



5-motions-zircon
zircon blanks medium
10/16, 16 mm height
2 pieces
REF 360 1101 6
10/20, 20 mm height
2 pieces
REF 360 1102 0



Asseccories:

5-motions-colors
zircon coloring liquid
each 100 ml
A1 REF 360 1CA1 0
A3 REF 360 1CA3 0
B1 REF 360 1CB1 0
B3 REF 360 1CB3 0
C3 REF 360 1CC3 0

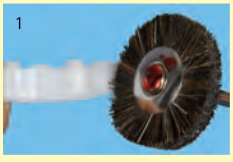
Zi-polish - the perfect mirror polish!



***Zi*-polish**
5 g
REF 360 1002 5

Zircon polishing paste for high gloss surfaces. Two different diamond grain sizes for pre- and high gloss polishing of marginal edges, basal areas, primary crowns, individual abutments and bars. The special binding agent avoids spraying of the polishing past when dipping the brush into the paste container. This also reduces paste consumption.

- the high content of diamond particles reduces polishing time and leaves a highly glossy surface
- special binding agent reduces paste consumption
- proper wipe off of pre polish residues from dents



Due to a special binding agent the paste sticks to the brush, saving material also.



Perfect and speedy mirror polish is achieved by high diamond particle density.

5-motions-glue and 5-motions-active



5-motions-active
activator spray for
5-motions-glue
200 ml
REF 360 1002 7

Tough-flowing super glue for clean and safe connection of blanks and modelation. Activator-spray for 5-motions-glue provides safe joint between modelation and blank and to other materials.

- non-dripping and clean application
- quick setting with 5-motions-active activator spray saves time
- bonds all materials to one another and is hence universally suitable



5-motions-glue
super glue gel
20 g
REF 360 1002 6



Pin point fixation with 5-motions-glue. Quick and safe connection by using 5 motions-active spray.



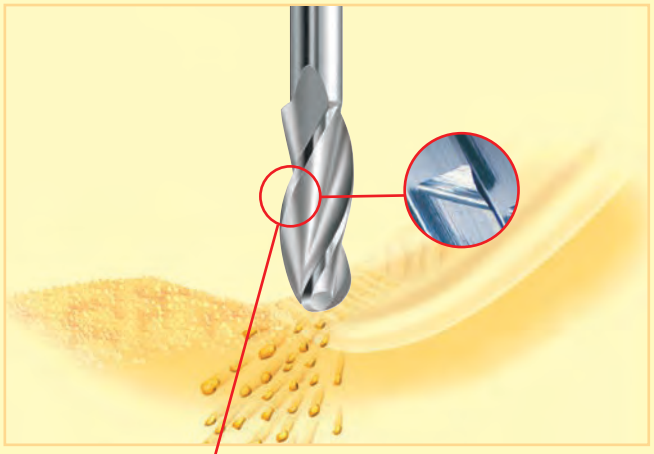
Quick frame mounting of the zircon blanc. By using the activator spray different materials are joint together.
This widens the field of indication.

Scanners and grinders

Multiple fields of applications in dental technique require special geometries for precise zircon processing.
The approved relief grinding technique of bredent created special burs for precise cutting and smooth surfaces.

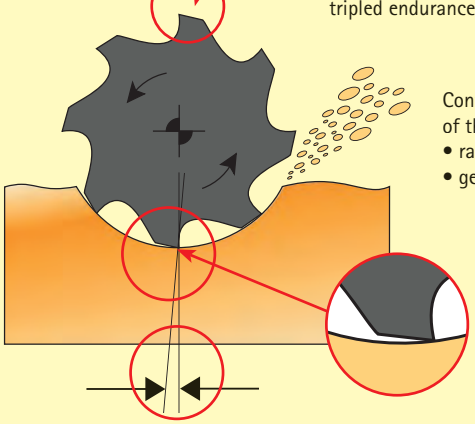
- **applicable for all units using a magnification factor of 1:1,25**
- **Relief grinding technology stands for smooth surfaces and reduced retouching work.**
- **11 different designs for a wide range of applications**
- **special tool steel stands for long life span and endurance**

Relief grinding technology means smooth surfaces avoiding material ruptures:



bredent-relief-cutting tool

Relief-cutting edge:
bold support of the cutting edge for tripled endurance



Controlled material ingression of the tool
- rattle free handling
- generates smooth surfaces

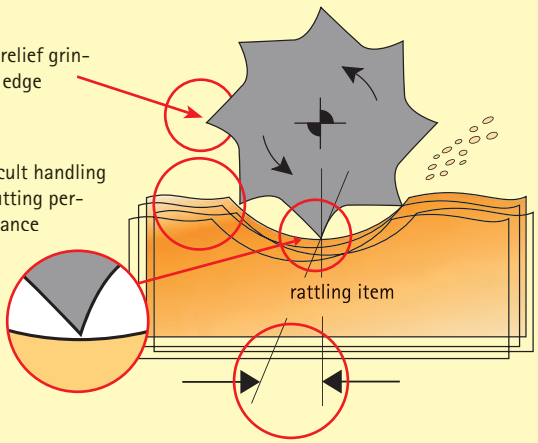
Optimized chip angle for increased cutting performance

Tripled life-span and endurance compared to conventional bredent-gearing.
In a special process, bredent tungsten carbide burs of the latest development state are provided with relief grinding properties.
This stabilises the cutting edges against ruptural destruction. This also enhances the endurance of those tools by the factor three compared to conventional tools for green state processing.
In addition the relief grinding design optimizes the chip angle for immaculate cutting performance.

Comparison:
A conventional tool

Non relief grinding edge

Difficult handling of cutting performance



Conventional chip angle

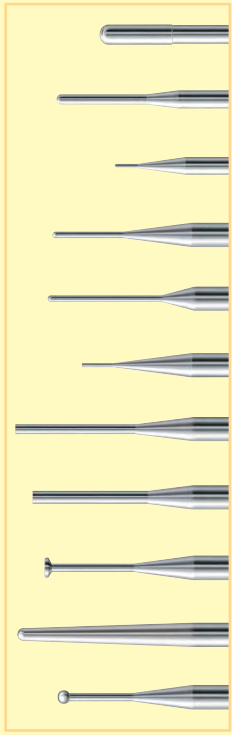
Scanners and grinders

Relief grinding technology for smooth surfaces, avoiding surface ruptures:





Harmonized scanners and burs in various shapes and sizes covering all aspects of processing. The solution for simple and succesful zirconium work. Relief grinding geometry of burs provides an immaculate balance, a clean and smooth surfaced grinding pattern, avoiding ruptures of cutting edges.



5-motions-scanner 4
4 mm rounded, **REF 360 1005 1**

5-motions-scanner 2
2 mm rounded, **REF 360 1005 2**

5-motions-scanner 1
1 mm rounded, **REF 360 1005 3**

5-motions-scanner 1 long
1 mm rounded, **REF 360 10L5 3**

5-motions-scanner 1 extra long
1 mm rounded, **REF 360 1XL5 3**

5-motions-scanner 0,6 Abutment
0,6 mm straight, **REF 360 1A05 4**

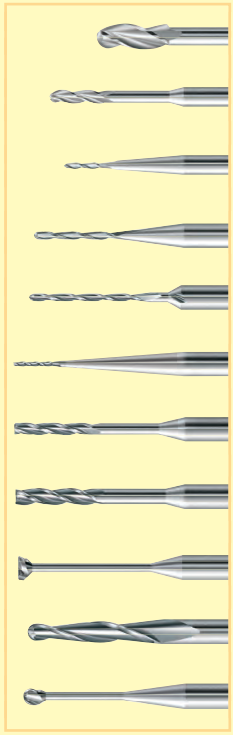
5-motions-scanner 1 Abutment
1,5 mm straight, **REF 360 1A15 4**

5-motions-scanner 2 Abutment
2 mm straight, **REF 360 1A25 4**

5-motions-scanner Undercut
1,4 mm, **REF 360 1U35 5**

5-motions-scanner conical 2°
2° rounded, **REF 360 1C25 6**

5-motions-scanner Rapidy 2
2 mm rounded, **REF 360 1K25 7**



5-motions-milling cutter 4
4 mm rounded, **REF 360 1004 1**

5-motions-milling cutter 2
2 mm rund, **REF 360 1004 2**

5-motions-milling cutter 1
1 mm rounded, **REF 360 1004 3**

5-motions-milling cutter 1 long
1 mm rounded, **REF 360 10L4 3**

5-motions-milling cutter 1 extra long
1 mm rounded, **REF 360 1XL4 3**

5-motions-milling cutter 0,6 Abutment
0,6 mm straight, **REF 360 1A04 4**

5-motions-milling cutter 1 Abutment
1,5 mm straight, **REF 360 1A14 4**

5-motions-milling cutter 2 Abutment
2 mm straight, **REF 360 1A24 4**

5-motions-milling cutter Undercut
1,4 mm, **REF 360 1U34 5**

5-motions-milling cutter conical 2°
2° rund, **REF 360 1C24 6**

5-motions-milling cutter Rapidy 2
2 mm rounded, **REF 360 1K24 7**

All burs and scanners have a spindle diameter of 3 mm and are suitable for units with an enlarge factor of 1 : 1,25.



Preliminary work by 5-motions-milling cutter 2, speedy and smooth performance.



Deep grindings like with abutments become effortless with long shaped burs.



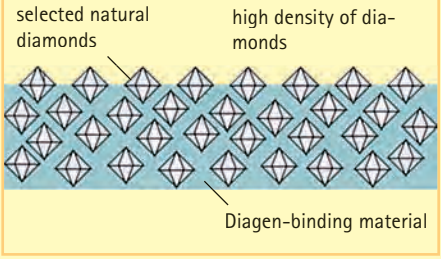
The right angled, flat headed burs provide a good seating surface on implant platforms.



Drilling and surface work is carried out precisely with the Rapidy 2.

Diagen-Turbo-Grinder

Schematic diagram



The diamond grinder system with extraordinary cutting properties through special Diagen-Diamant-binding. Highly abrasive grinding performance on zircon surfaces. Applying only light pressure for gentle surface processing.

- two grades of abrasion offers more flexibility of use
- special binding (rough) equals 20 % more endurance and saves on tool consumption
- Cooling effect to avoid damages of zircon
- recommended by leading zircon- and ceramic manufacturers

Highest grinding performance and abrasivity on zircon, ceramic and metal surfaces at low contact pressure.
Improved endurance compared to regular bindings effectively allow a wide field of applications.

Zircon grinding patterns



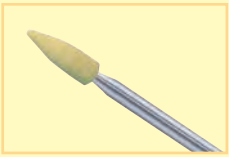
New shapes in 2 grades of abrasion.
Boosts trimming through rough diamond grain sizes and special Diagen binding. Surface roughness: 26 µm.



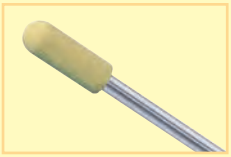
New shapes in well-proven quality.
Surface smoothening and fine cut by fine grain diamonds. Surface roughness: 2 µm.

Diagen-Turbo-Grinder, rough

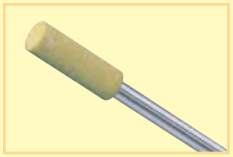
New quality of diagen binding with large diamond grain size for speedy trimming.



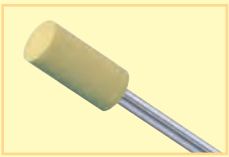
Cylinder pointy
Ø 3.5 x 11 mm
2 pieces
REF 340 G015 5



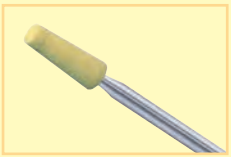
Cylinder rounded
Ø 4.5 x 13 mm
2 pieces
REF 340 G016 5



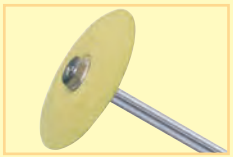
Cylinder
Ø 4.5 x 13 mm, 2 pieces
REF 340 G016 0



Cylinder
Ø 6.0 x 13 mm
2 pieces
REF 340 G017 0



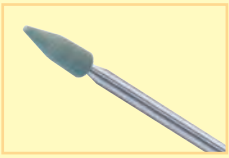
Cone
Ø 3.5 x 11 mm
2 pieces
REF 340 G015 0



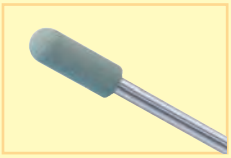
Lentil
Ø 22 x 2 mm
1 piece
REF 340 G021 0

Diagen-Turbo-Grinder, fine

Established fine grain quality for perfect surface smoothness.



Cylinder pointy
Ø 3.5 x 11 mm
2 pieces
REF 340 0015 5



Cylinder rounded
Ø 4.5 x 13 mm
2 pieces
REF 340 0016 5



Cone
Ø 3.5 x 11 mm
2 pieces
REF 340 0015 0



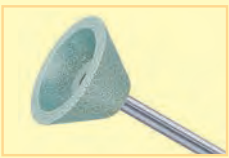
Cylinder
Ø 4.8 x 13 mm
2 pieces
REF 340 0016 0



Cylinder
Ø 6.5 x 13 mm
2 pieces
REF 340 0017 0



Top down cone with notch
Ø 6 x 8 mm
1 piece
REF 340 0025 0



Top down cone with notch
Ø 12 x 6 mm
1 piece
REF 340 0024 0



Lentil
Ø 22 x 2 mm
1 piece
REF 340 0021 0



Wheel
Ø 22 x 2 mm
1 piece
REF 340 0022 0



Wheel
Ø 15 x 3,5 mm
2 pieces
REF 340 0018 0



Wheel
Ø 22 x 4,5 mm
1 piece
REF 340 0019 0

Resins and composites are high-tech materials used in modern dentistry. They have a long tradition at bredent and have become established components of complex system solutions for all prosthetic indications. We pay special attention to coordinating material properties, material compound, modelling and handling as well as shading and polishing.



Lab. Od. Lazetera Antonio - Savona - Italy, Dott. Vescia Luca –Villa Dossola - Italy

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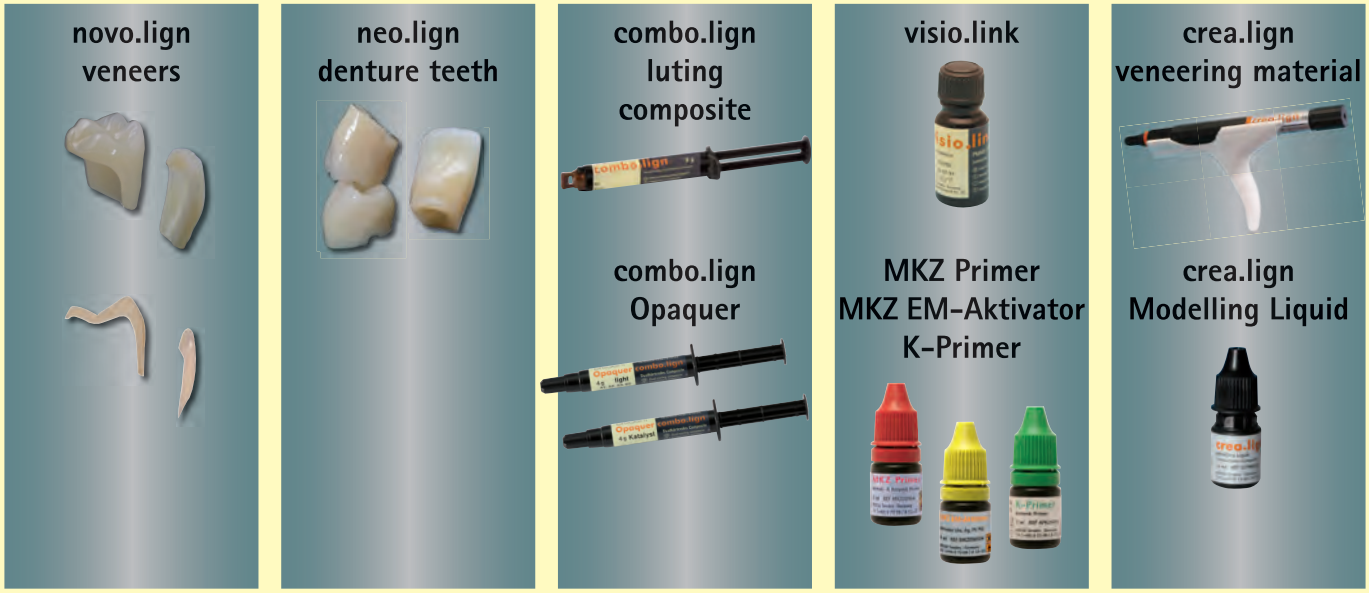
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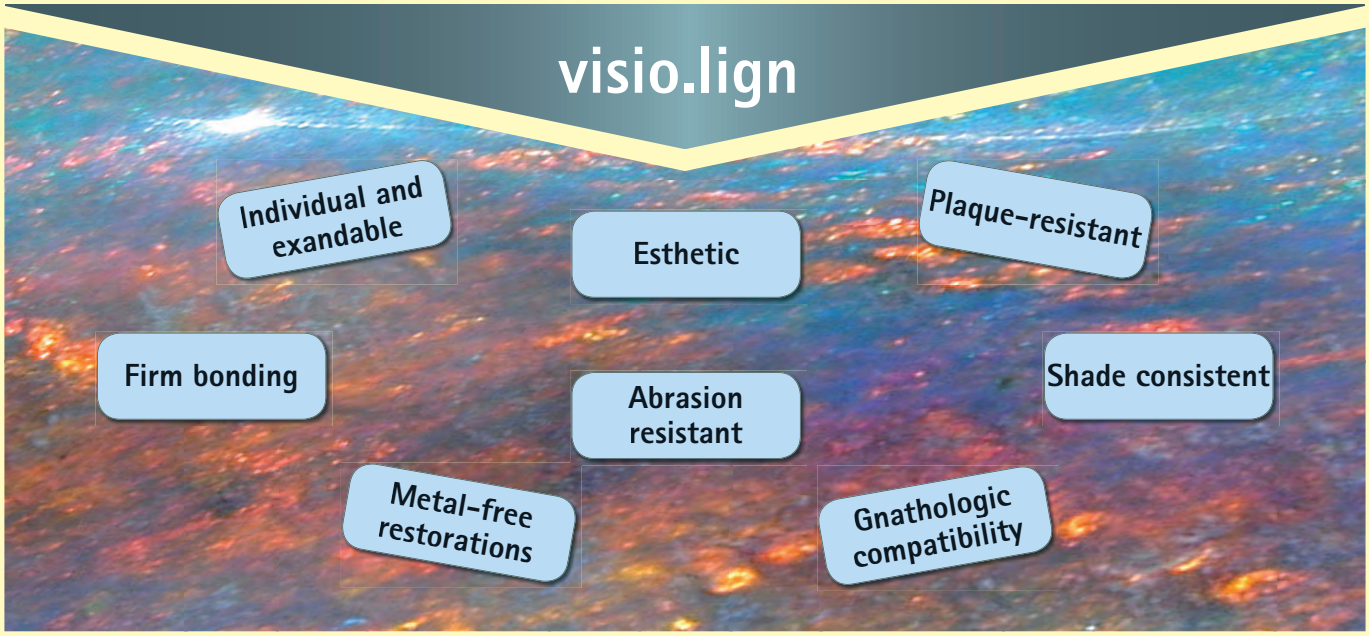
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visio.lign

The visio.lign system is based on multi-layer veneers (novo.lign) developed in accordance with the example of natural teeth. A bonding system with matched shades and suitable individualization and add-on materials enable the perfect combination of individual and efficient veneering techniques. With abrasion values comparable to natural teeth, visio.lign provides gentle occlusion - an advantage especially for implant-supported restorations. Patients can have a preview of the result thanks to the esthetic try-in with the novo.lign veneers. By using the silicone key based on the try-in, perfect design of the framework can be easily achieved. The high-strength novo.lign veneers can be bonded to all framework materials used in dental techniques and individualized with crea.lign veneering material.





Indications - Application areas:



Horizontally screw-retained visio.lign bridge on SKY Unicone with reduced number of implants (LJ/UJ).

Photo: MDT Oliver Heinzmann



Complex case on SKY fast & fixed, layered using the Inverse Layering Technique with crea.lign, upper and lower immediate definitive restorations.

Photo: Vincenzo Musella



Horizontally screw-retained visio.lign bridge, ZrO2 framework on individual SKY uni.fit ZrO2 abutments.

Photo: DT Andreas Lüdtke



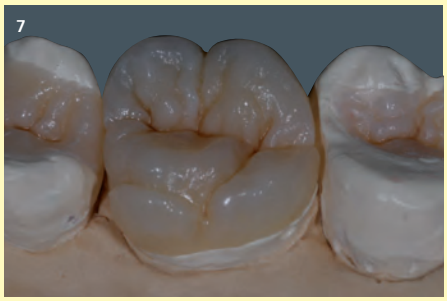
Non-precious metal bar-lock restoration combined with visio.lign and neo.lign teeth.



Fixed bridge made of Bio HPP, partially veneered with visio.lign.



Non-precious veneer bridge, individualized with crea.lign using the cut-back technique.



Onlay- Overlay – Inlay layered with crea.lign using the Inverse Layering Technique.

Photo: Vincenzo Musella



Definitive lab-made crea.lign veneers, adhesively cemented using the non-prep technique.

Photos: Vincenzo Musella



Removable NPM veneer bridge on telescopic crowns, combined with neo.lign denture teeth and novo.lign veneers.



Immediate temporary SKY fast & fixed restoration with novo.lign and top.lign breformance framework resin.

Photo: MDT Oliver Heinzmann

visio.lign system components



novo.lign veneers
(sets of anterior and posterior teeth)
Multi-layer veneers made of high-impact PMMA composite, anatomical designs of anterior and posterior teeth: natural esthetics for all indications. Available in the classic A-D shades.



neo.lign denture teeth
(sets of anterior and posterior teeth)
Anatomical denture teeth with natural shade gradient and designs for implant and fixed/ removable restorations made of high-impact PMMA composite. The cross-system occlusal design was developed for all common occlusion concepts. Available in the classic A-D shades.



combo.lign
Light- and dual-curing luting composite for reliable shade reproductin and superior bonding of the novo. lign veneer to all framework materials.
Available in the classic A-D shades.



combo.lign Opaquer
Light- and dual-curing opaque material which ensures perfect curing. Bonding system tested at universities, compatible with all metal primers and silanizing techniques; perfectly suitable when using mechanical retentions. Available in three tooth and one gingiva color to ensure color stability in all A-D shades in combination with combo.lign.



visio.link
Universal, light-curing PMMA and composite primer. visio.link is used for superior bonding of PMMA denture resins/composites, high-impact PMMA composite materials (novo.lign veneers, neo.lign denture/acrylic teeth) and combo.lign.



crea.lign veneering material
- with nano-ceramic fillers only (does not contain dental glass)
- superior polishing properties to produce perfect surfaces, Ra 0.03
- flowable, improved coating – transition to the veneer without gaps
- low water absorption, ensure mechnanical stability
- no accumulation of plaque
- available in the classic A-D dentin shades, incisal, GUM and stains.
- light-curing crea.lign opaquer available in new tooth shades and a gingiva color for "free-hand layering"

visio.lign system components



crea.lign Modelling Liquid
crea.lign Modelling Liquid can be used to dilute crea.lign and to increase the flowability; it also allows to obtain a „homogeneous" transition from the denture resin to crea.lign during red-white individualization.
Just like crea.lign, crea.lign Modelling Liquid is resistant to discoloration and plaque. When mixing with crea.lign, the maximum proportion is 30 %.



K-Primer
K-Primer is used to achieve adhesion of veneering ceramic and press ceramic, e.max press as well as silicate ceramic, such as CAD-Blanks, Mark II, to composites such as crea.lign. K-Primer is not suitable for direct use and can be used for repairing ceramic veneers.



MKZ Primer
MKZ Primer is used for conditioning all metal NPM alloys and titanium, zirconium dioxide, aluminium oxide and spinell ceramic. This way chemical bonding to composites such as crea.lign is achieved. Accordingly, MKZ Primer is perfectly suited for luting individual abutments.



MKZ EM-Aktivator
MKZ EM-Aktivator can only be used in combination with MKZ Primer - in a ratio of 1:1 for conditioning precious metal frameworks (Au, Ag, Pt, Pd) and to achieve chemical bonding to composites such as crea.lign.



visio.sil (transparent silicone for keys)
Transparent, addition-curing silicone for keys; hardness: approx. 60 Shore A; for the fabrication of translucent keys and for using and processing light-curing materials.



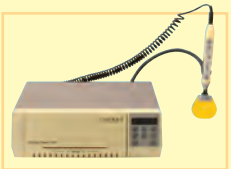
visio.sil ILT (transparent silicone for keys)
visio.sil ILT was developed especially for the Inverse Layering Technique. This transparent, addition-curing silicone for keys features a high hardness of approx. 75 Shore A. It is flowable to fill the approximal space and to ensure perfect reproduction of the surface texture; however, it is firm and stable and can be applied very precisely. visio.sil ILT must not be applied in the patient's mouth (class I medical device) in the hardened condition.



visio.sil fix (high-precision silicone for keys)
visio.sil fix is an addition-curing, high-precision silicone for keys. The use of visio.sil fix enables perfect and detailed reproduction of approximal spaces and the gingival situation of the wax setup. Only high-gloss polishing needs to be carried out after fabricating the restoration so that a lot of time is saved and the amount of work is reduced.



haptosil D (kneading silicone)
haptosil D is an addition-curing kneading silicone with a hardness of 90 Shore A for the fabrication of exact and stable keys. haptosil D is mostly used in combination with the other visio.sil silicones to add more stability to these materials.



Versatile polymerization unit for practice and laboratory
The bre.Lux Power Unit was developed for processing veneering and dental materials. This light-curing unit features a wavelength range of 370 nm to 500 nm. The LEDs have a life of 20,000 hours.



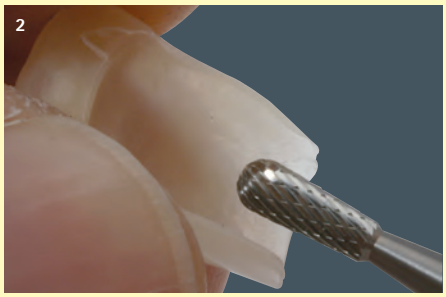
The visio.lign Toolkit has been optimized for processing composite and visio.lign veneers and ensures a perfect finish. The combination of the materials of the visio.lign veneering system and the visio.lign Toolkit results in surfaces featuring plaque resistance and shade stability and their quality and resistance is identical to the ones of a ceramic material.

Processing steps

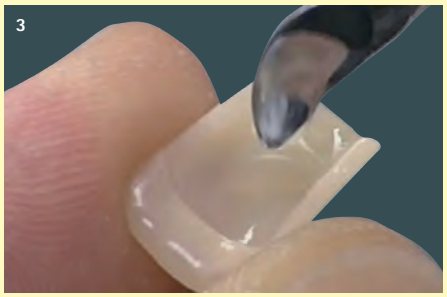
Esthetic try-in



Selecting the suitable color and design.



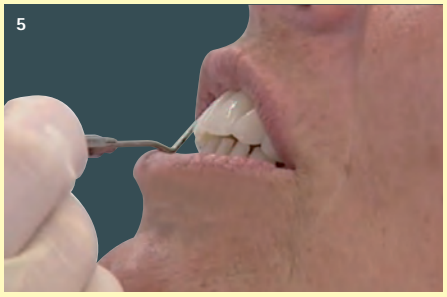
If required, the novo.lign veneer is milled thinly in the cervical area.



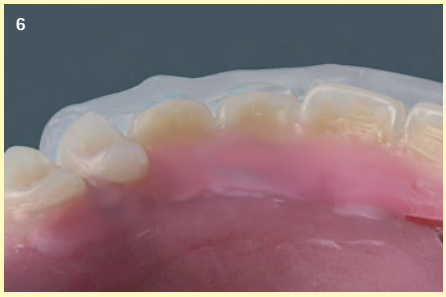
Fixation of the veneer with tooth-colored wax, beauty setup wax.



Completed esthetic setup.

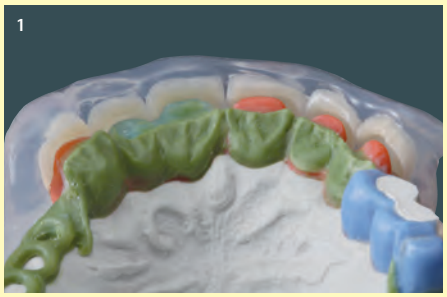


Try-in, control and correction if required



Fixing the esthetic setup with visio.sil (transparent silicone for keys).

Modelling the framework



Perfect modelling of the framework is achieved through the use of the key.

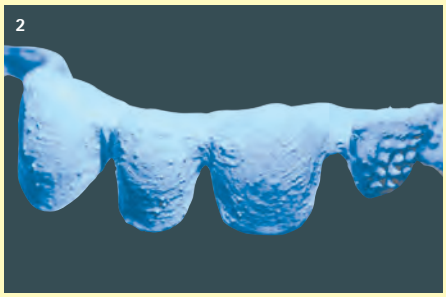


The perfectly designed metal framework

Conditioning the framework



Conditioning with MKZ Primer.



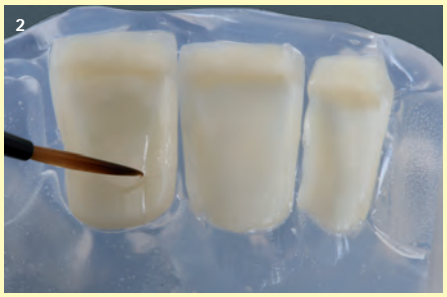
Apply opaquer and polymerize.

Processing steps

Bonding



Veneers were sandblasted with 110 µm aluminium oxide.



Apply visio.link thinly and cure with light.



Apply combo.lign to the inner side of the veneer.



Spread excess material and cure with light subsequently.

Finish with crea.lign



After bonding, crea.lign is applied in the approximal area.



Contouring the palatal area with crea.lign.

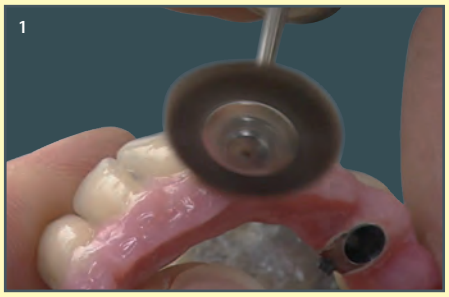


Individual design of the red-white area.



A hand lamp can be used for intermediate curing of crea.lign.

Finishing

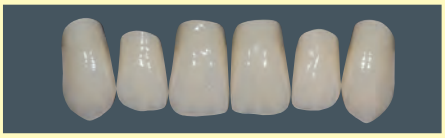


Prepolishing with Abraso-Fix brush and Acrypol.



High-gloss polishing with cotton buff and Abraso-Starglanz.

novo.lign A veneers



novo.lign A (anterior) veneer

Layering and design of the novo.lign veneers are based on natural teeth. Despite the very thin and slender design of the veneers, the characteristics, such as mamelons and buildup, could be integrated into the veneers.

novo.lign A veneer:
- facet thickness in the cervical and central areas: 1 mm
- 10 upper designs
- 3 lower designs

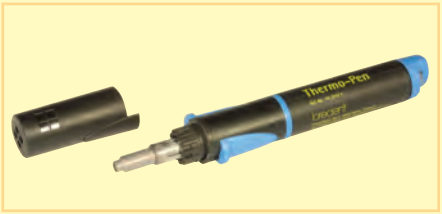


All designs of the novo.lign A veneers are available as sets of 6 pieces, sets of incisors and sets of cuspids.

As a result, veneers, for example as a cuspid set, can be combined with the neo.lign incisors (no. 4) depending on the respective case.

Moreover, the cuspid (no. 2) veneers of large designs, for example l47, can be combined with the incisor veneers of other designs, for example l45.

Thermo-Pen



Thermo-Pen
is a hot-air device with piezo technology without open flame. The veneers can be heated without the risk of burning them. The temperature required to shape the veneers is approx. 250° C. Improved coating of e.g. telescopic crowns is achieved through expansion.

Thermo-Pen
1 piece
REF 110 0147 0

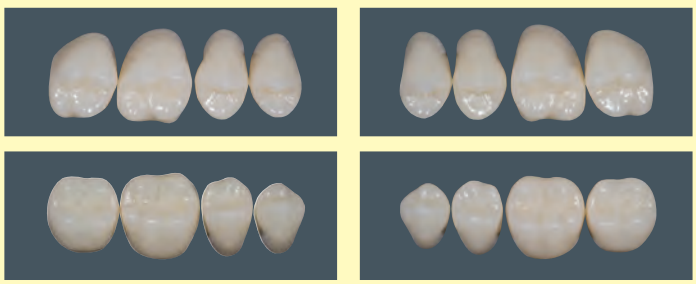


The novo.lign is heated with the Thermo-Pen.



The hot veneer is expanded.

novo.lign P veneers, G-design

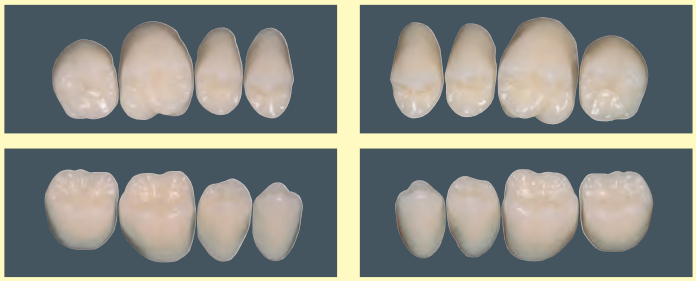


novo.lign P (posterior) multi-functional veneers, G-design

The novo.lign P (posterior) veneers are distinguished by their multi-functional occlusal design which enables the use for all occlusion concepts. The various layers of natural teeth were copied for the novo.lign veneers.

novo.lign P multi-functional veneers:
- facet thickness in the cervical and central areas: 1.2 mm
- 2 sizes - G3 and G4 - for upper and lower jaws

novo.lign P veneers, W-design



novo.lign P (posterior) veneer for crown and bridge restorations, W-design

The novo.lign P (posterior) veneer, W-design, was developed especially for crown and bridge restorations. These veneers are more voluminous, larger and allow coating large tooth stumps. The layering structure could be maintained despite the layer thickness which is lower than the ones of the G3 and G4 designs.

novo.lign P veneer for crown and bridge restorations:
- facet thickness in the cervical and central areas: 0.8 mm
- 3 sizes - W3, W4 and W5 - for upper and lower jaws

neo.lign A denture teeth

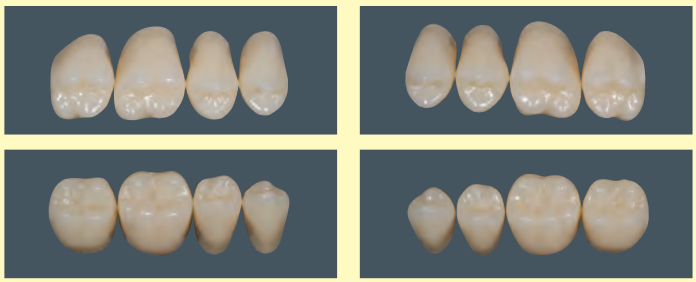


neo.lign A (anterior) denture tooth

The development of visio.lign is based on natural teeth. The lifelike design of the novo.lign veneers was transferred to the neo.lign denture teeth. The shade, design and layering structure of neo.lign anterior and posterior are key aspects within the visio.lign veneering system. Perfect harmony for partial restorations, attachment techniques and implant prosthetics.

neo.lign A denture tooth:
- 9 upper anterior sets
- 3 lower anterior sets

neo.lign P denture teeth, G-design

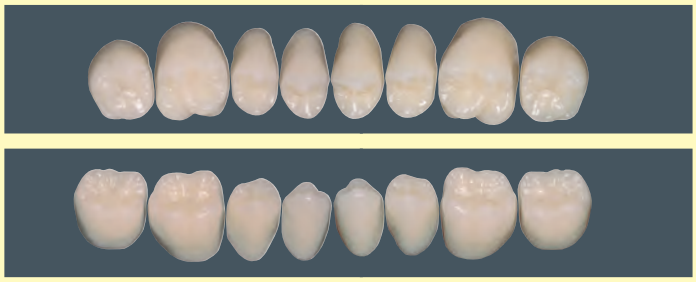


neo.lign P (posterior) multi-functional denture tooth, G-design

The neo.lign P (posterior) denture tooth is based on the novo.lign P veneer. The multi-functional occlusal design was transferred to the neo.lign P denture teeth and enables the use for all familiar occlusion concepts.

neo.lign P denture tooth, G-design:
- 3 sizes - G2, G3 and G4 - for upper and lower jaws

neo.lign P denture teeth, L-design

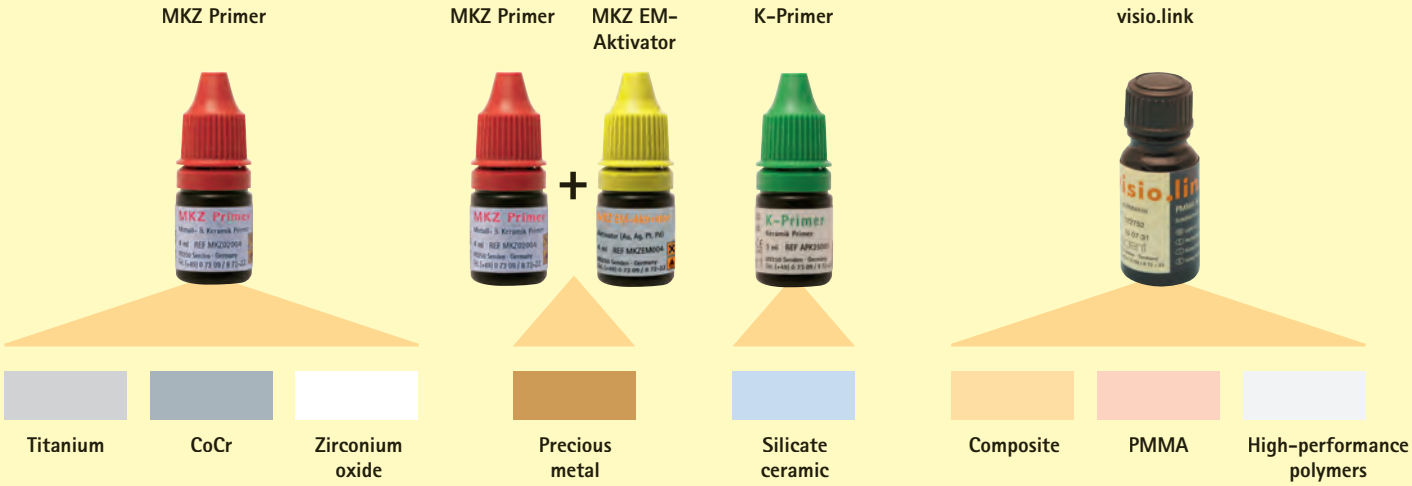


neo.lign P (posterior) denture tooth for lingualized setup, L-design

The neo.lign P (posterior) denture tooth, L-design, was developed especially for lingualized setup techniques. The L-design allows a lingualized setup without grinding adjustments.

neo.lign P denture tooth, L-design:
- 3 sizes - L2, L3, L4 - for upper and lower jaws

Indications of visio.lign primers



The bond strength values achieved for all primers listed above are clearly high than the minimum value of 5 MPa (DIN EN ISO 10477).
See chart, page 298.

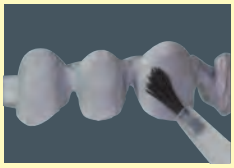
MKZ Primer and MKZ EM-Aktivator



MKZ Primer
4 ml
REF MKZ02004

MKZ EM-Aktivator
4 ml
REF MKZEM004

MKZ Primer and MKZ EM-Aktivator – conditioning of the framework.
The finished metal frameworks (NPM/precious metal-free/CoCr/precious metal) need to be sandblasted at 3-4 bar (zirconium frameworks: max. 2 bar) using 110 µm aluminium oxide. The frameworks must not be steam-cleaned with a steam jet. Use alcohol and a clean brush for cleaning. When blowing dry with compressed air, make sure that the compressed air is free from oil. Use a brush to apply MKZ Primer to the framework and leave to dry completely; then apply the desired opaquer.
When conditioning precious metal/reduced precious metal content frameworks, MKZ Primer and MKZ EM-Aktivator need to be mixed in the ratio of 1:1 and applied subsequently.

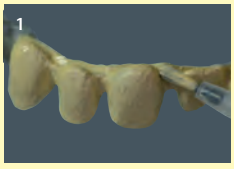


Apply MKZ Primer / MKZ EM-Aktivator and leave to dry. Then the opaquer can be applied.

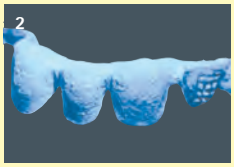
combo.lign Opaquer



combo.lign Opaquer can be used individually – either as a light-curing or a dual-curing material – by mixing the catalyst with the base paste in a ratio of 1:1. For mechanical retentions, we recommend dual-curing to ensure adequate curing of the opaquer.
REF see Order Form.



Use a suitable brush (opaquer brush) to apply combo.lign Opaquer.



Light-curing of combo.lign Opaquer. Polymerization for 180 sec is recommended after each layer.

visio.link



visio.link
10 ml
REF VLPMMA10

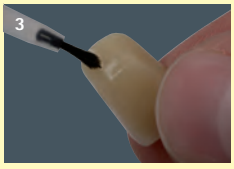
visio.link – conditioning of veneers.
The veneers need to be sandblasted at 2 to 3 bar using 110 µm aluminium oxide. Do not use a steam jet for cleaning the veneer. A thin coat of visio.link is applied to the novo.lign veneers; make sure to apply a very thin coat since excessively thick coats may affect the bond strength. After applying visio. link and polymerizing for 90 sec (lightwave range: 370-400 nm), the surface should be dry and exhibit a silky mat gloss.



If required, the novo.lign veneer is milled thinly in the cervical area.



Sandblast novo.lign veneer at 2-3 bar using 110 µm aluminium oxide.



Apply visio.link thinly and polymerize for 90 sec.



A silky mat gloss indicates that visio.link has been applied correctly. Excessive application of visio.link must be avoided.

combo.lign luting composite



The dual-curing combo.lign hardens chemically and by exposure to light. To achieve the final hardness, combo.lign needs to be polymerized in the light-curing unit for 180 sec. An adhesive gap of 40 µm – 2 mm can be filled with combo.lign. combo.lign should always be covered with crea.lign because it is difficult to process and polish.
REF see Order Form.



Applying combo.lign into the conditioned veneer.



Spread or remove excess material.



Harden each tooth for 10 sec., remove the key and use light-curing unit for final polymerization (180 sec.).

K-Primer



K-Primer
3 ml
REF APK25003

K-Primer – conditioning of veneering ceramic.
The veneering ceramic needs to be sandblasted at max. 2 bar using 110 µm aluminium oxide or roughened using a diamond bur (dry). After sandblasting/roughening, the framework must not be cleaned with a steam jet! Any contamination needs to be removed with alcohol and a clean brush. The veneering ceramic is bonded to crea.lign using K-Primer. K-Primer and crea.lign are suitable for direct and indirect use. Damage to ceramic veneers caused by chipping can be quickly and easily repaired.



Sandblast "chipping area" at a pressure of 2 bar using 110 µm aluminum oxide or roughen with diamond abrasive tool (dry). Then K-Primer is generously applied; let it dry for approx. 30 sec.



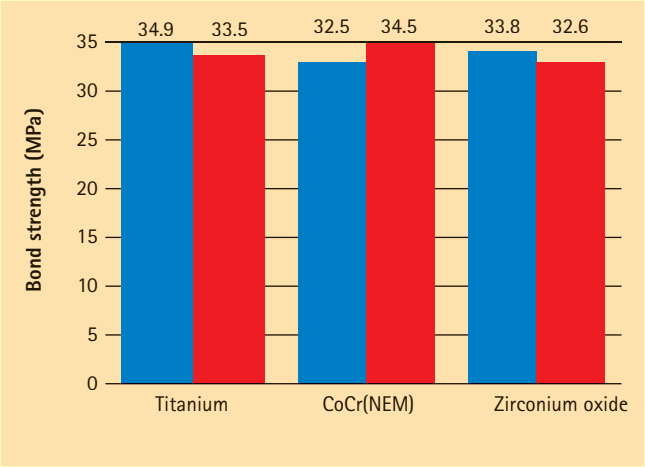
After applying the suitable crea.lign material and subsequent polishing, no transition is visible at the repaired spot.

Bond strength tests

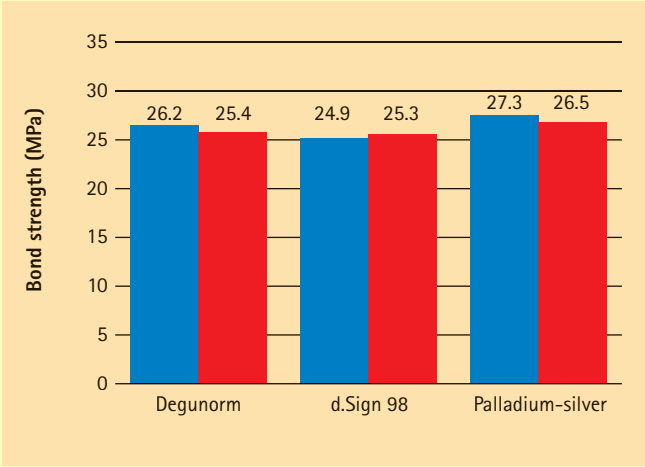
Bond strength according to DIN EN ISO 10477 / University of Jena
Minimum value: 5 MPa

1 day
25,000 TSC

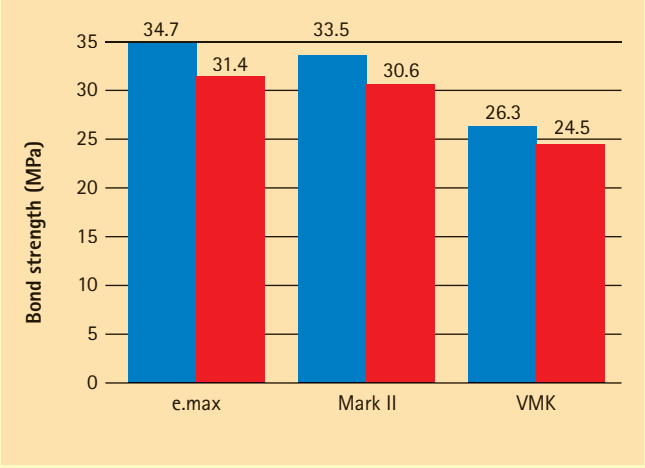
Bond strength – combo.lign (luting composite) vs veneering composite, MKZ Primer



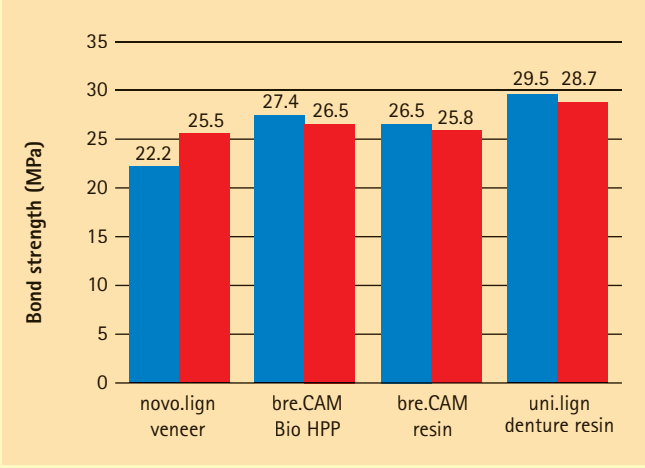
Bond strength – combo.lign (luting composite) vs veneering composite, MKZ Primer + MKZ II Primer



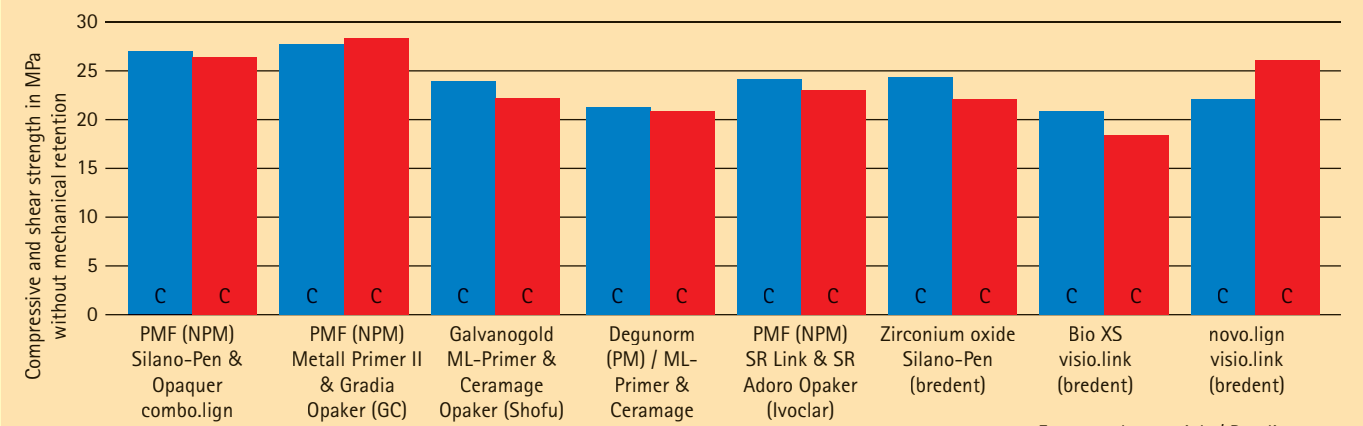
Bond strength – combo.lign (luting composite) vs veneering composite K-Primer



Bond strength – composite (combo.lign/crea.lign) vs resins visio.link



Bond strength – combo.lign (luting composite) vs competitors



Framework materials / Bonding system
C = Cohesive failure
*Thermal stress cycles 5° C / 55° C

crea.lign veneering material



The final design/shape of the veneer is prepared with crea.lign. Without intermediate curing, the layer thickness of crea.lign should not exceed 1 mm. crea.lign may be used in situ, e.g. to repair ceramic veneers.
crea.lign can be applied from the syringe or using a brush.
The use of crea.lign facilitates the application with the brush and optimizes modelling of the approximal spaces. All crea.lign materials can be mixed with one another. Various incisal, neck, dentin and gingiva materials are available for individualization purposes. The purely light-curing crea.lign opaquer is used to cover the frameworks in the suitable tooth shade.
REF see Order Form.



crea.lign Modelling Liquid
10ml
REF CLFMOD10

Applying crea.lign:



After luting the novo. lign veneers, crea.lign is applied to the approximal and distal areas.



The tooth shape is built up in the palatal area using crea.lign.

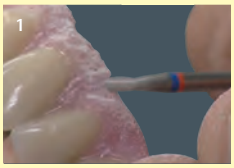


crea.lign GUM materials are used for individual contouring in the red-white area.

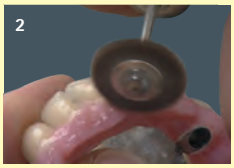


Intermediate polymerization is required each time material is applied. A hand lamp may be used. Final polymerization is carried out in the bre.lux Power Unit (light-curing unit).

Finishing crea.lign:



Finishing with a tungsten carbide bur.



Prepolishing with Abraso-Fix brush and Acrypol prepolishing paste.



Prepolishing with a goat-hair brush and Acrypol prepolishing paste.

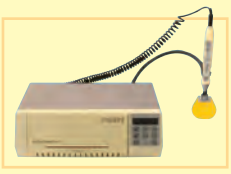


High-gloss polishing with cotton buff and Abraso Starglanz polishing paste.

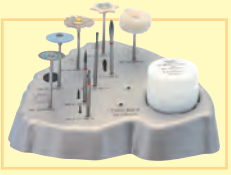
Accessories:



MagicBrush
size 2
2 pieces
REF 390 M002 0



bre.Lux Power Unit
REF 140 0097 0



Composite finishing set
incl.
Acrypol polishing paste
Abraso-Starglanz high-gloss polishing paste
REF VLTOOLKIT

crea.lign veneering material

Inverse Layering Technique
Fabrication of veneers (Non-prep technique) with crea.lign composite



The prepared master model with removable dies.



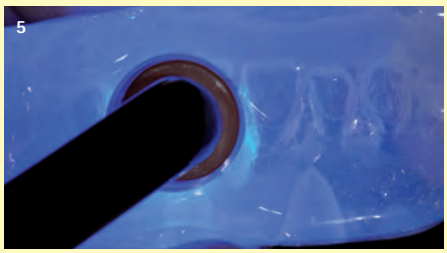
Morphological restoration of the anterior teeth (wax).



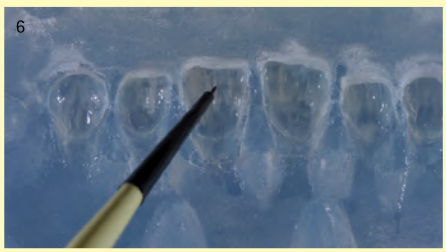
Fabrication of the silicone key with visio.sil ILT (separated dies).



A brush is used to apply E2 incisal material into the key.



Light-curing for approx. 5 sec after each layer.



Application of the effect materials to create contrasts. Light-curing: approx. 5 sec.



Opalescent effects with Incisal opal and Incisal blue materials; light-curing: approx. 5 sec.



Application of dentin, then the key is placed on the model for light-curing.



Final curing: 360 sec. in the bre.Lux Power Unit.



Excellent translucency of the completed crea.lign veneers.



Initial situation.



Veneers in situ after definitive bonding.

Technique and photos: Vincenzo Musella.
Clinical case: Dott.sa Cinzia Barbieri, Modena – Italy.

haptosil D





haptosil D
Components A and B
1300 g each
REF 540 0118 0
7500 g each
REF 540 0119 0

haptosil D addition-curing kneading silicone
With a hardness of 90 Shore A, haptosil D is perfectly suited for the fabrication of precise and stable keys. Models for repair and extension can also be produced within a short time. As a result, considerable time can be saved compared to conventional model fabrication techniques.

visio.sil



visio.sil
50 ml
REF 540 0120 0
visio.sil mixing cannulas
12 pieces
REF 320 0045 7

visio.sil transparent silicone for keys
Translucent keys are fabricated with visio.sil (hardness: approx. 60 Shore A); these keys are the bases for luting the novo.lign veneers to the respective framework. To add more stability to a visio.sil key, the additional use of haptosil D (hardness: approx. 90 Shore A) silicone for keys is recommended.



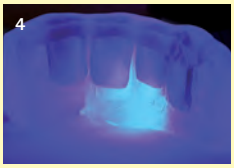
The haptosil D key is shaped similar to a picture frame.



The key is built up with visio.sil.



The key is smoothed with a finger dipped in detergent.



Light can penetrate the key, which ensures reliable bonding/luting of the veneers.

visio.sil ILT



visio.sil ILT
50 ml
REF 540 0140 0
visio.sil mixing cannulas
12 pieces
REF 320 0045 7

visio.sil ILT (Inverse Layering Technique) transparent silicone for keys
visio.sil ILT (hardness: approx. 75 Shore A) was developed for the Inverse Layering and the flasking technique. This technique is used, for example for the fabrication of veneers. The veneer is layering directly into the key in reverse order. The visio.sil ILT key must not be placed into the patient's mouth for luting the veneers.



Initial situation



Plaster master model



Wax up on the master model ready for fabrication of the key.



The key is placed into the mouth (crea.lign is still soft).



crea.lign is polymerized with the hand lamp.



Completed esthetic preview of the additional veneers in situ.

Technique and photos: Vincenzo Musella.

visio.sil fix



visio.sil fix
50 ml
REF 540 0130 0

visio.sil fix high-precision silicone for keys
visio.sil fix can be used in combination with other silicones for keys, such as visio.sil, visio.sil ILT or haptosil D .
visio.sil fix provides perfect reproduction of approximal spaces/surfaces so that only high-gloss polishing is required as a final step. The suction effect of visio.sil fix allows to avoid cyanoacrylate adhesive to fix the veneers in the key; as a result, the surface structure of the veneers is retained.

visio.sil fix in combination with haptosil D



visio.sil fix is applied to the setup.



haptosil D is mixed and pressed to visio.sil that is still soft.



Holes are drilled into the key using the matrix drill.



Light penetrates through the drill hole and the veneer.

visio.sil fix in combination with visio.sil



visio.sil fix is applied to the setup.



visio.sil is applied to visio.sil fix that is still soft.

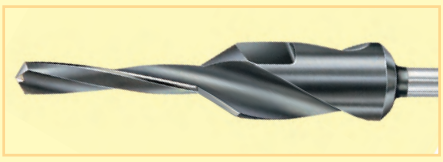


The precisely molded approximal spaces and margins can be clearly recognized.



Light penetrates through the key.

Location matrix drill

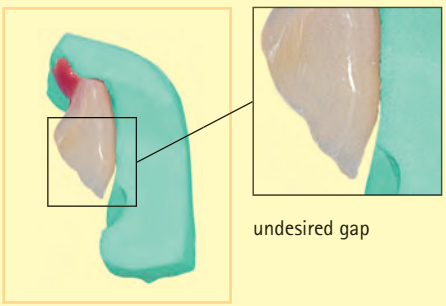


Location matrix drill
1 piece
REF 330 0078 0

The safest and most accurate method for reliable positioning of acrylic teeth in plaster or silicone matrixes.
With the conventional method acrylic teeth are fixed incisally/occlusally in the matrix using adhesive wax. This includes the risk that the tooth is pulled out of the matrix due to the contraction of the wax and an undesired gap results.
The holes that are drilled through the matrix allow the application of adhesive wax onto the acrylic teeth. Due to the contraction of the wax the tooth is pulled into the matrix and held safely.

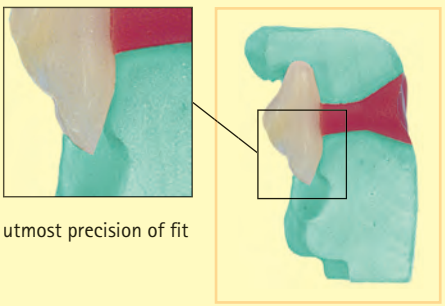
No adhesive – no displacement of the teeth in the matrix!

conventional method



undesired gap

with matrix drill



utmost precision of fit

Red-white esthetics set



- nanofilled crea.lign provides shade stability and unsurpassed plaque resistance.
- visio.link ensures permanent bonding of crea.lign to all PMMA denture resins; tested at universities.

Assortment

28 pieces
Red-white esthetics set
1 x aluminium folder
8 x crea.lign
1 x GUM Opaquer
1 x visio.link
1 x MKZ Primer
1 x crea.lign Modelling Liquid
2 x demo denture
2 x MagicBrush, size 2
1 x layering instructions
1 x single-hand grip
1 x mixing pad
8 x application cannulas
REF CLIGNSETG

- the fully cross-linked uni.lign denture resin enables perfect chemical bonding to crea.lign and avoids visible transitions and adjustments.
- since crea.lign does not contain dental glass, a surface quality identical to denture resins (Ra value: 0.03 µm) is achieved to guarantee fast and simple polishing.
- high gloss is achieved in only 3 minutes using the same polishing procedure as for denture resin
- bridges veneered with ceramic can also be individualized with the red-white esthetics set.
- individual red-white esthetics in just 6 steps.
- a dental technician needs only approx. 45 minutes to individualize anterior restorations.
- this set contains all necessary materials including step by step layering instructions.
- elegant aluminium folder for presentation to patients and dentists.
- two demo dentures are included to the set; one of them can be individualized to demonstrate patients and dentists the particular advantages.

visio.lign tooth cabinet



Assortment

10 pieces
visio.lign tooth cabinet
1 x visio.lign tooth cabinet
1 x drawer insert, crea.lign
8 x drawer insert, novo.lign A
REF VLIGNBOX1

visio.lign set 2



Assortment

43 pieces
visio.lign set 2
1 x visio.lign tooth cabinet
1 x visio.link
1 x combo.lign
8 x novo.lign P posterior sets
10 x novo.lign A anterior sets
10 x mixing cannulas, combo.lign
8 x drawer insert, novo.lign A
4 x drawer insert, novo.lign P
REF VLIGNSET2

visio.lign set 3





Assortment

61 pieces
visio.lign set 3
1 x visio.lign tooth cabinet
1 x visio.link
1 x combo.lign
1 x Opaquer combo.lign
1 x Opaquer catalyst
2 x crea.lign
8 x novo.lign P posterior sets
10 x novo.lign A anterior sets
2 x single-hand grip
10 x mixing cannulas, combo.lign
10 x application cannulas
8 x drawer insert, novo.lign A
4 x drawer insert, novo.lign P
1 x drawer insert, Opaquer combo.lign
1 x drawer insert crea.lign/single-hand grip
REF VLIGNSET3

novo.lign A and P veneers



Assortment

21 pieces
novo.lign A and P veneers
1 x aluminium folder
12 x novo.lign A anterior set
8 x novo.lign P posterior set
REF VLIGNPRVN

neo.lign A and P denture teeth



Assortment

25 pieces
neo.lign A and P denture teeth
1 x aluminium folder
12 x neo.lign A anterior set
12 x neo.lign P posterior set
REF VLIGNPRVTI

Assortment

24 pieces
neo.lign A and P denture teeth
12 x neo.lign A anterior set
12 x neo.lign P posterior set
REF NLUPSET2

Opaquer set



Assortment

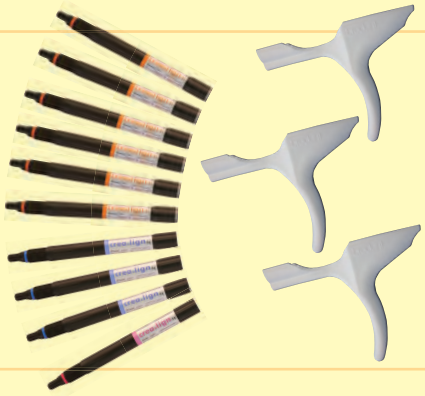
7 pieces
Opaquer set
1 x Opaquer combo.lign light
1 x Opaquer combo.lign medium
1 x Opaquer combo.lign intensive
1 x Opaquer combo.lign GUM
2 x Opaquer catalyst
1 x drawer insert Opaquer combo.lign
REF OLIGNSET1

crea.lign sets



Assortment

46 pieces
crea.lign set
10 x crea.lign
2 x crea.lign Stains
1 x crea.lign Modelling Liquid
1 x syringe holder
12 x single-hand grip
20 x application cannulas
REF CLIGNSET12



Assortment

13 pieces
crea.lign set
10 x crea.lign
3 x single-hand grip
REF CLIGNSETN

visio.lign Toolkit



Composite processing kit
REF VLTOOLKIT

The kit includes:
Acrypol polishing paste for veneering composites 170 g
Abraso-Starglanz high luster polishing paste 50 ml

The visio.lign Toolkit has been optimized for processing composite and visio.lign veneers and ensures a perfect finish. The combination of the materials of the visio.lign veneering system and the visio.lign Toolkit results in surfaces featuring plaque resistance and shade stability and their quality and resistance is identical to the ones of a ceramic material.

- Burs with relief produce smooth surfaces and reduce the time for polishing
- Prepolishing and high luster polishing paste included in the kit
- Tools arranged at different heights to ensure easy access and grasp
- Removable glass jar to avoid drying out of the high luster polishing paste
- Pictograms and reference numbers printed on the tools for better visual control
- Three empty spaces for additional tools

Suitable light-curing units

Polymerization times for visio.link, combo.lign and crea.lign

Manufacturer	Product name	Wavelength in nm *	Polymerization time visio.link	Polymerization time combo.lign	Polymerization time crea.lign
bredent	bre.Lux Power Unit	370 - 500	90 s	180 s	6 min
Dentsply / Degudent	Triat, Triat 2000 Eclipse	400 - 500 k.A.	3 min 60 s	6 min 180 s	10 min 6 min
Heraeus Kulzer	Dentacolor XS, Uni XS Heraflash	320 - 520 320 - 520	90 s 90 s	180 s 180 s	6 min 6 min
GC	Laboligth LV-III	380 - 490	2 min	5 min	10 min
Ivoclar Vivadent	Targes Power furnace Lumamat 100	400 - 580 400 - 580	4 min 4 min	180 s 180 s	8 min 6 min
Schütz Dental	Spektra 2000	310 - 500	2 min	180 s	6 min
Shofu Dental	Solitilite EX	400 - 550	90 s	180 s	6 min
Kuraray Dental	CS 110	k.A.	2 min	5 min	8 min
Hager & Werken	Speed Labolight	320 - 550	90 s	180 s	8 min
3M ESPE	Visio BETA (newP1 - P4) Visio BETA (old U0 - U3)**	400 - 500 400 - 500	> 4 min(P2) 7 min (U1, U3)	7 min (P2) 15 min (U0)	15 min (P1) 15 min (U0)

* manufacturer's data ** new set of lamps is recommended

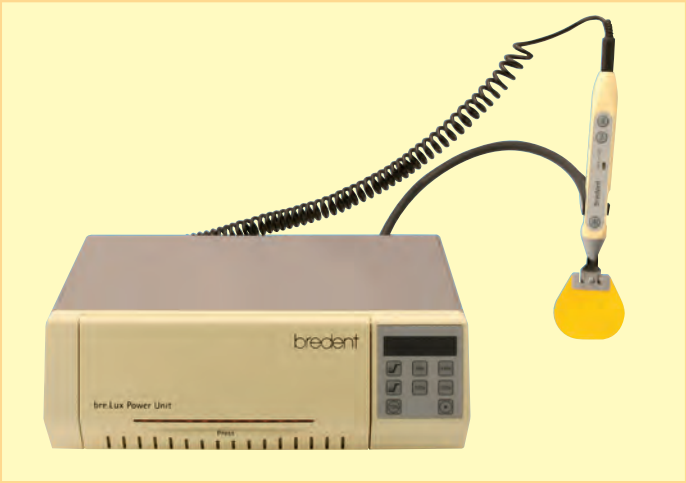
bre.Lux polymerization times

		bre.Lux LED N (manual lamp)		bre.Lux Power Unit (stationary unit)		
Manufac-turer	Product name	Final polymeri-zation	Fixation/ Prehardening	Intermediate polymerization (layers)	Final polymerization	Prepolymerization function/Reduction
bredent	visio.link	30 s	-	-	90 s	40 s 50 %)
bredent	combo.lign	X	15 s	120 s	180 s	-
bredent	crea.lign	X	15 s	180 s	360 s	20 s (50 %)
bredent	Opaquer combo.lign	X	15 s	180 s	180 s	-
bredent	Ropak UV	X	-	180 s***	360 s	-
bredent	Kompaktopaker	X	-	180 s***	360 s	-
bredent	Kompaktopaker tooth-colored UV	X	-	180 s	360 s	-
bredent	compoForm UV	30 s	15 s	-	180 s	-
bredent	Tray material UV*	X	X	90 s	2 x 180 s	40 s (50 %)
bredent	Stumpflack lichthärt.	30 s**	15 s	90 s	180 s	20 s (50 %
bredent	SERACOLL UV	15 s	15 s	-	90 s	-
bredent	Qu-connector	30 s	-	-	90 s	40 s (50 %)
Heraeus	Signum	X	-	180 s	360 s	20 s (50 %)
Heraeus	Palatray XL	X	-	90 s	2 x 180 s	40 s (50 %)
Shofu	Solidex	X	-	180 s	360 s	20 s (50 %)
GC	Gradia	X	15 s	180 s	360 s	20 s (50%)
Wegold	S-Lay	-	-	180 s	360 s	20 s (50 %)
VITA	VITA VM LC Opaque	-	30 s	-	2 x 360 s	-
VITA	VITA VM LC Compos.	-	30 s	180 s	Pontics up to max. 2mm: 360 s	fix up to 1.5 mm, 180s (50%)
Degudent	in:joy	-	-	180 s	360 s	20 s (50%)

180 s Polymerization time
\- not intended
X Contraindication

* If UV tray material is used, polymerization is carried out from both sides for 180 seconds each. Optionally, prehardening for 90 sec. may be carried out (upper side); during final polymerization, the bottom side is polymerized first ** for a single application *** Apply opaquer in two layers

bre.Lux Power Unit



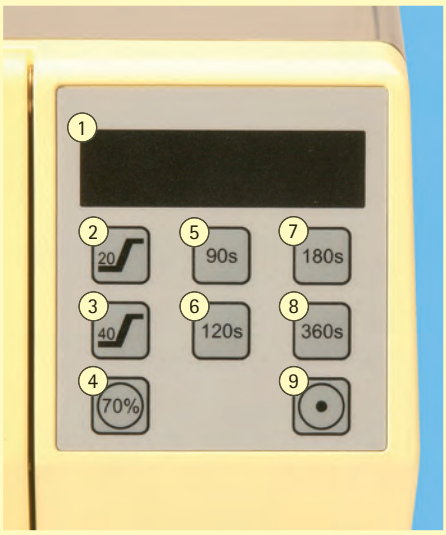
Assortment

bre.Lux Power Unit
Product package consists of
1 polymerization device
1 bre.Lux LED N manual lamp with spiral cable
1 bre.Lux UpDown
1 flexible hose
1 mains cable
REF 140 0097 0

Versatile polymerization unit for practices and laboratories.
To date, several devices were necessary for processing facing and dental materials. With bre.Lux, the concept of processing all current materials with one single device becomes reality for the first time.

Performance
- Fixation / Hardening / Intermediate polymerization and final thorough hardening directly in the workplace and with one single device
- 370 - 500 nm covers the required wavelength range, for the manual lamp as well
- Performance delay and reduction minimize the properties and results of dental materials
- Start-up delay and polymerization time can be easily combined
- Large volume for 2 models, optimally and uniformly illuminated

Keyboard layout of the light polymerization device
(1) Display
(2) 20 seconds with 50 % power
(3) 40 seconds with 50 % power
(4) Continuous operation with 70 % power
(5) 90 seconds full power
(6) 120 seconds full power
(7) 180 seconds full power
(8) 360 seconds full power
(9) Continuous operation at full power



Consistency
The membrane keyboard already comes with several parameters. On the left side: Reduced power for the start-up phase with 20 and 40 seconds and for continuous operation at full power as well. The combination (such as start with reduced power) can be combined with the programmed running times of 60 to 360 seconds according to demand. Example: 40 seconds with reduced power combined with a 180-second total running time means that the total running time is lowered from 180 to about 40 seconds, and the running time would still be 140 seconds under full power.
Please take note of the application recommendations for bredent products.

Keyboard layout for the manual lamp



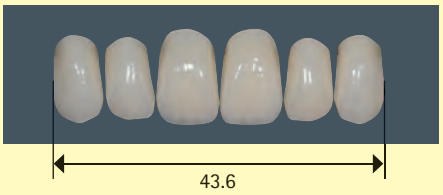
(1) Continuous operation, start/stop (2) 15 seconds 3) 30 seconds

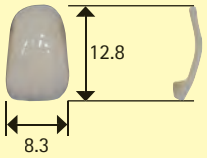


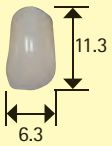
Energy
The bre.Lux Power Unit consists of one LED light polymerization device with 21 power LEDs in 3 different capacities, from 370 nm to 500 nm. The LEDs have a useful life of 20,000 hours. The bre.Lux LED N manual lamp (with spiral cable) features a capacity ranging from 370 nm to 500 nm.
The flexible hose – with receptacle ring for the manual lamp – serves as third hand and allows two-handed work.

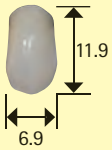
novo.lign A, upper anterior Facet in the cervical and central area is 1 mm thick

C43



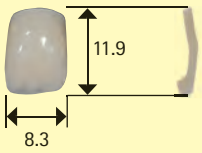


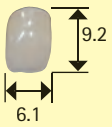


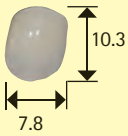


A44

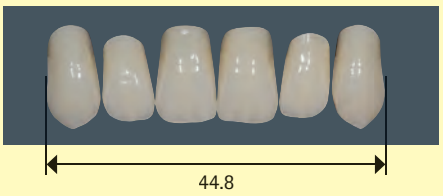


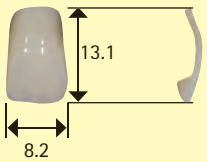


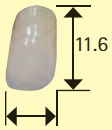


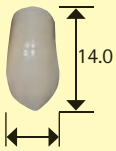


I45



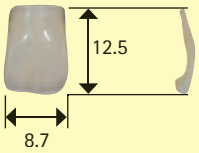


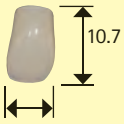




S46

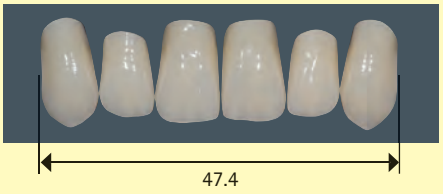


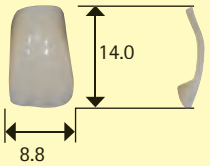


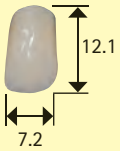


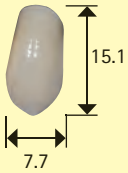


I47

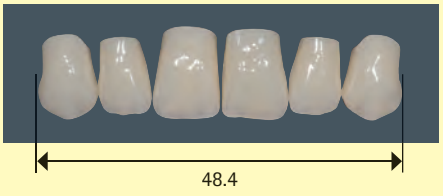


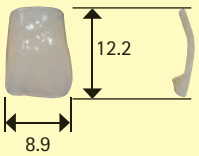


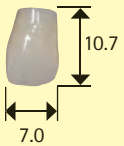


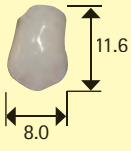


D48

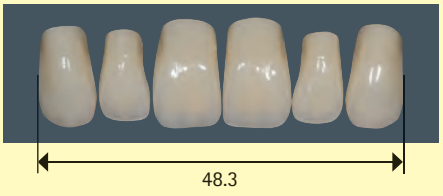


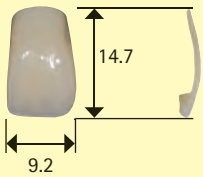


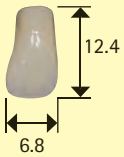


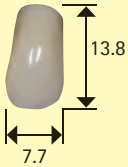


M48

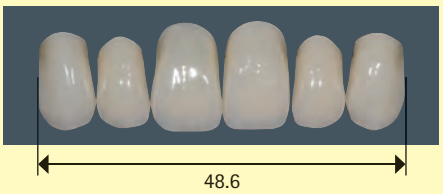


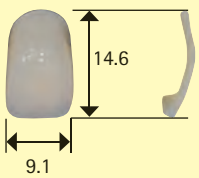


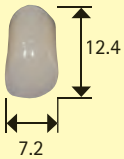


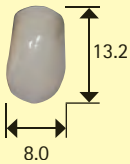


D49







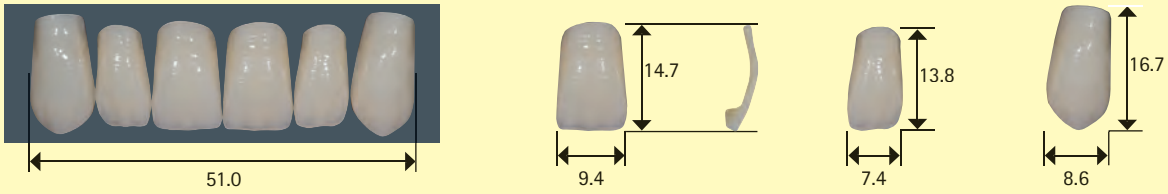


(Photos scale 1:1, dimensions in mm)

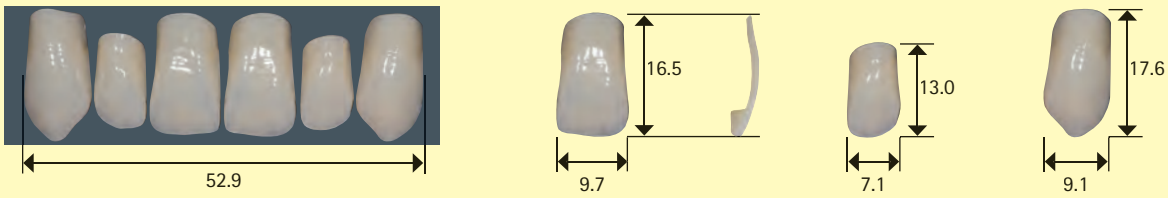
(Photos scale 1:1, dimensions in mm)

novo.lign A, upper/lower anterior Facet in the cervical and central area is 1 mm thick

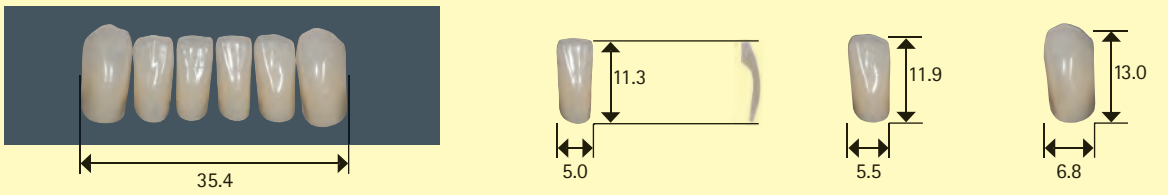
B51



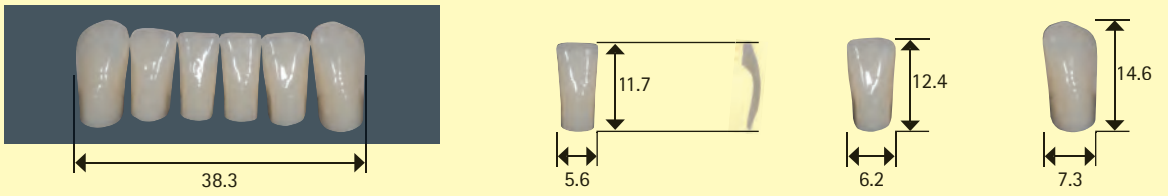
K53



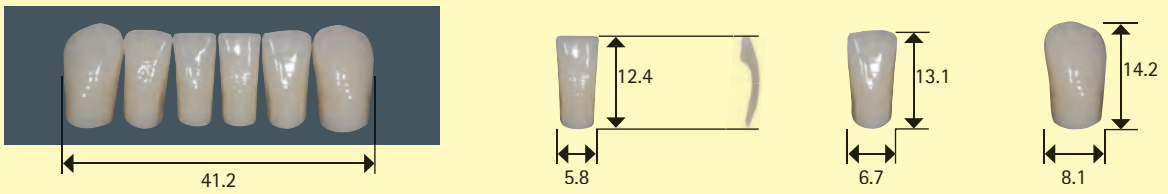
T35



D38

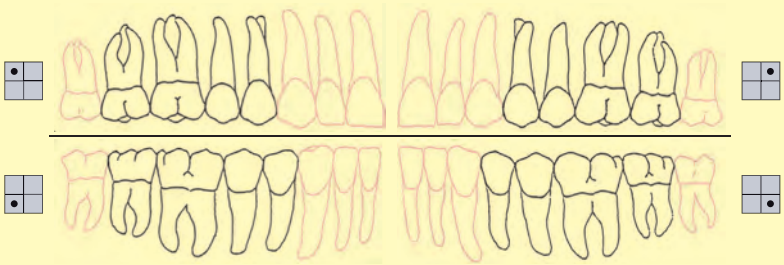


D41



novo.lign A, novo.lign P and combo.lign are available in shades of the classic A-D shade system as well as in the bleached shade BL3.

Supply based on quadrant



Design - combination table

anterior		posterior
Upper	Lower	Upper/Lower
C43	T35	G3/W3
A44	T35	G3/W3
I45	T35	G3/W3
S46	T35/D38	G3/W3
I47	D38	G3/W4
D48	D38	G3/G4/W4
M48	D38	G3/G4/W4
D49	D38/D41	G3/G4/W4
B51	D41	G4/W5
K53	D41	G4/W5

novo.lign P, upper / lower posterior, G-design Facet in the cervical and central area is 1 mm thick

Multi-functional veneers

G3



G4

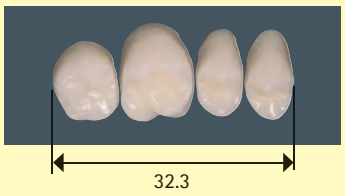


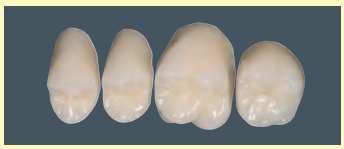
(Photos scale 1:1, dimensions in mm)

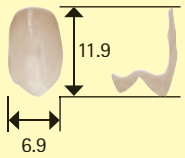
novo.lign P, upper / lower posterior, W-design Facet in the cervical and central area is 1 mm thick

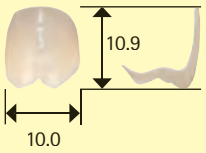
Veneers for crowns and bridges

W3

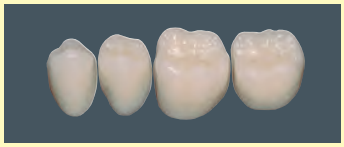


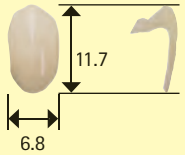


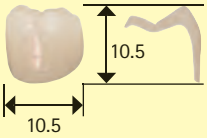




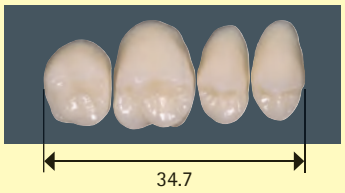


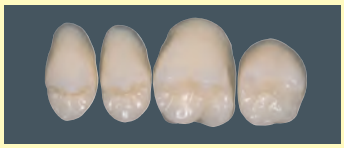


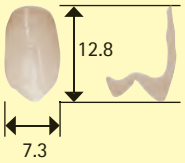


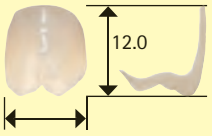


W4

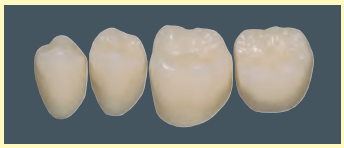


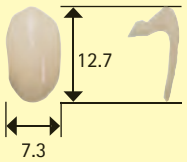


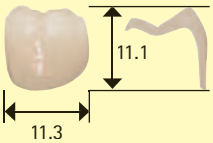




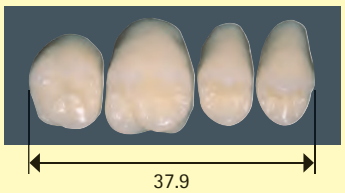


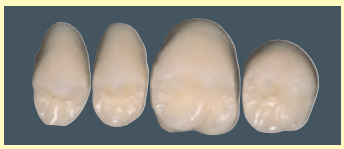


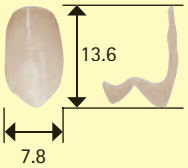


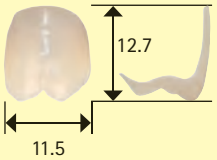


W5

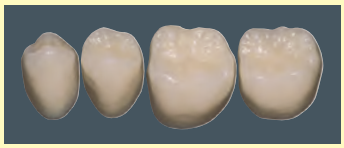


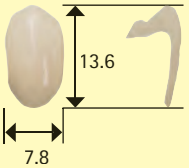


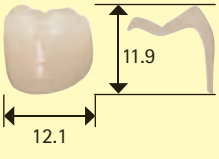










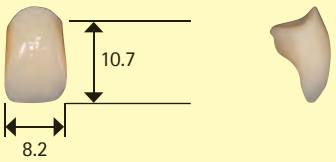


(Photos scale 1:1, dimensions in mm)

neo.lign A, upper anterior

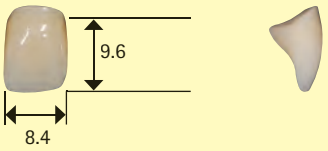
C43





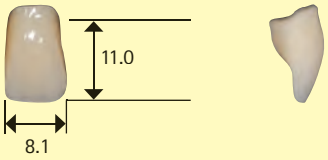
A44





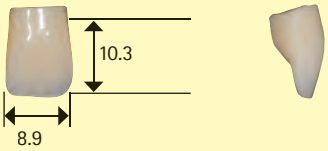
I45





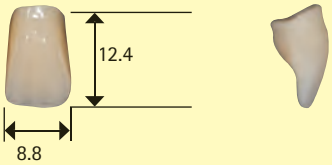
S46





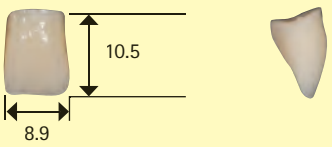
I47





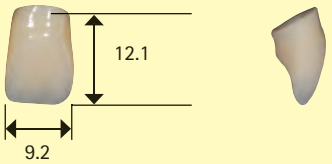
D48



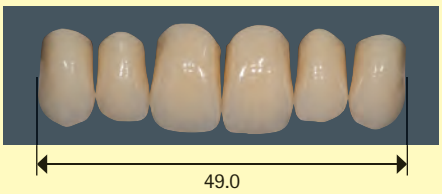


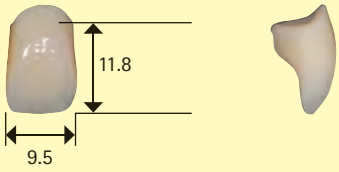
M48





D49



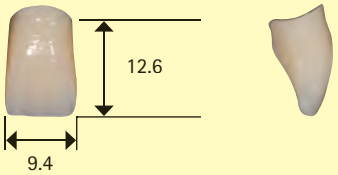


(Photos scale 1:1, dimensions in mm)

neo.lign A, upper/lower anterior

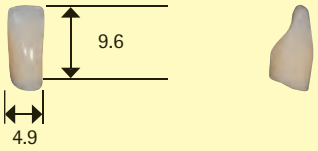
B51



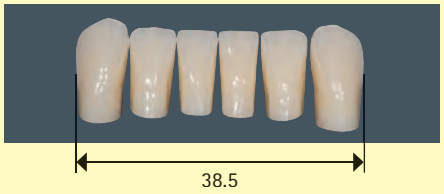


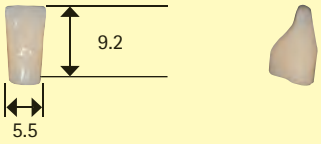
T35





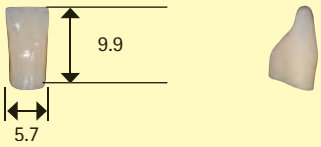
D38





D41

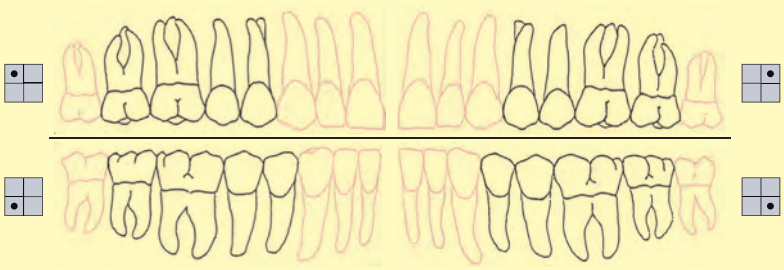




neo.lign is available in the classic VITA A-D shade system.

ISO 22112:2006

Supply based on quadrant



Design – combination table

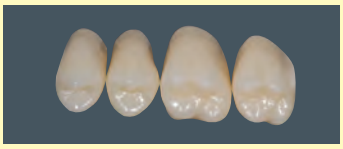
anterior Upper	posterior Lower	Upper/Lower
C43	T35	G2
A44	T35	G2/G3
I45	T35	G2/G3
S46	T35/D38	G3
I47	D38	G3
D48	D38	G3/G4
M48	D38	G3/G4
D49	D38/D41	G3/G4
B51	D41	G4

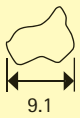
(Photos scale 1:1, dimensions in mm)

neo.lign P, upper/lower posterior, G-design

G2

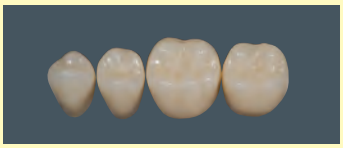








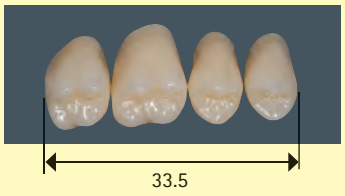


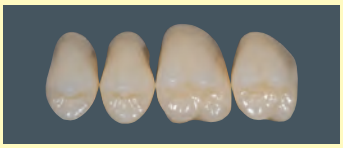






G3

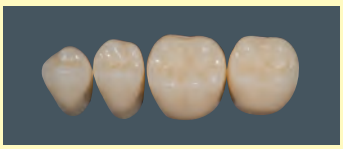








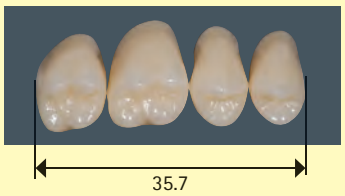


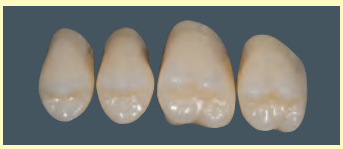






G4

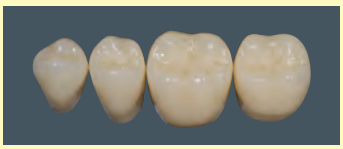
















(Photos scale 1:1, dimensions in mm)

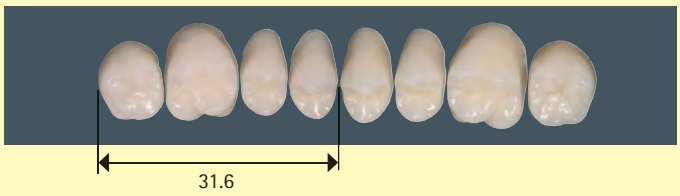
bredent group

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neo.lign P, upper/lower Posterior, L-design

neo.lign P for lingualized setups (dimension according to pilot series, deviations possible)

L2





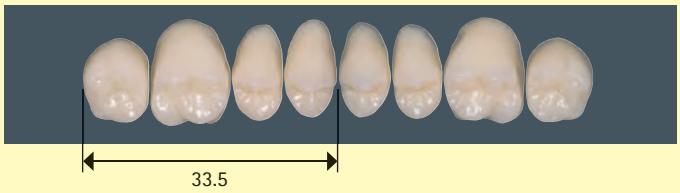






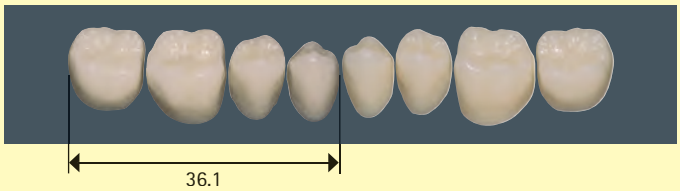


L3





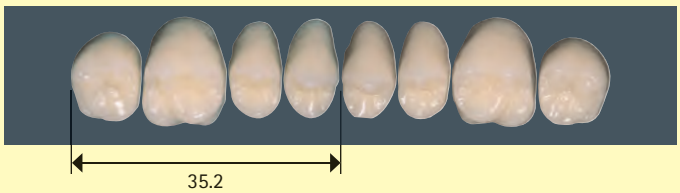






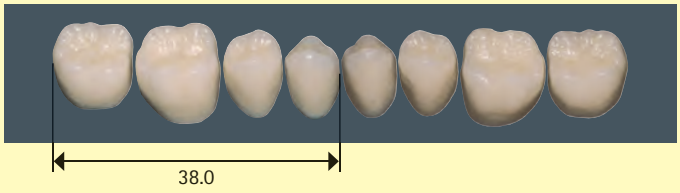


L4













(Photos scale 1:1, dimensions in mm)

novo.lign A		Shades (classic A–D shade system)																
		BL3	A1	A2	A3	A3,5	A4	B1	B2	B3	B4	C1	C2	C3	C4	D2	D3	D4
Upper anterior veneers	REF	BL3	A10	A20	A30	A35	A40	B10	B20	B30	B40	C10	C20	C30	C40	D20	D30	D40
C43 Set of 6 (13, 12, 11, 21, 22, 23)	VOC43 _ _ _ S																	
C43 Set of 4 (12, 11, 21, 22)	VOC43 _ _ _ 4																	
C43 Set of 2 (13, 23)	VOC43 _ _ _ 3																	
A44 Set of 6 (13, 12, 11, 21, 22, 23)	VOA44 _ _ _ S																	
A44 Set of 4 (12, 11, 21, 22)	VOA44 _ _ _ 4																	
A44 Set of 2 (13, 23)	VOA44 _ _ _ 3																	
I45 Set of 6 (13, 12, 11, 21, 22, 23)	VOI45 _ _ _ S																	
I45 Set of 4 (12, 11, 21, 22)	VOI45 _ _ _ 4																	
I45 Set of 2 (13, 23)	VOI45 _ _ _ 3																	
S46 Set of 6 (13, 12, 11, 21, 22, 23)	VOS46 _ _ _ S																	
S46 Set of 4 (12, 11, 21, 22)	VOS46 _ _ _ 4																	
S46 Set of 2 (13, 23)	VOS46 _ _ _ 3																	
I47 Set of 6 (13, 12, 11, 21, 22, 23)	VOI47 _ _ _ S																	
I47 Set of 4 (12, 11, 21, 22)	VOI47 _ _ _ 4																	
I47 Set of 2 (13, 23)	VOI47 _ _ _ 3																	
D48 Set of 6 (13, 12, 11, 21, 22, 23)	VOD48 _ _ _ S																	
D48 Set of 4 (12, 11, 21, 22)	VOD48 _ _ _ 4																	
D48 Set of 2 (13, 23)	VOD48 _ _ _ 3																	
M48 Set of 6 (13, 12, 11, 21, 22, 23)	VOM48_ _ _ S																	
M48 Set of 4 (12, 11, 21, 22)	VOM48_ _ _ 4																	
M48 Set of 2 (13, 23)	VOM48_ _ _ 3																	
D49 Set of 6 (13, 12, 11, 21, 22, 23)	VOD49 _ _ _ S																	
D49 Set of 4 (12, 11, 21, 22)	VOD49 _ _ _ 4																	
D49 Set of 2 (13, 23)	VOD49 _ _ _ 3																	
B51 Set of 6 (13, 12, 11, 21, 22, 23)	VOB51 S																	
B51 Set of 4 (12, 11, 21, 22)	VOB51 _ _ _ 4																	
B51 Set of 2 (13, 23)	VOB51 _ _ _ 3																	
K53 Set of 6 (13, 12, 11, 21, 22, 23)	VOK53 _ _ _ S																	
K53 Set of 4 (12, 11, 21, 22)	VOK53 _ _ _ 4																	
K53 Set of 2 (13, 23)	VOK53 _ _ _ 3																	
Lower anterior veneers																		
T35 Set of 6 (43, 42, 41, 31, 32, 33)	VUT35 _ _ _ S																	
T35 Set of 4 (42, 41, 31, 32)	VUT35 _ _ _ 4																	
T35 Set of 2 (43, 33)	VUT35 _ _ _ 3																	
D38 Set of 6 (43, 42, 41, 31, 32, 33)	VUD38 _ _ _ S																	
D38 Set of 4 (42, 41, 31, 32)	VUD38 _ _ _ 4																	
D38 Set of 2 (43, 33)	VUD38 _ _ _ 3																	
D41 Set of 6 (43, 42, 41, 31, 32, 33)	VUD41 _ _ _ S																	
D41 Set of 4 (42, 41, 31, 32)	VUD41 _ _ _ 4																	
D41 Set of 2 (43, 33)	VUD41 _ _ _ 3																	

Please enter the order quantity.

Composition of REF No. for novo.lign

1 2 3 4 5 6 7 8 9

1: novo.lign = **V**

2: Upper = **O**, Lower = **U**

3 4 5: Design **B51** or **D48** for molars, **1G3** = **1** = quadrant **G** = tooth mould **3** = tooth size

4 5: Width of set of 6 46 = 46 mm

6 7 8: Shade **A30** = A3

9: **S** = Set of 6 complete, **4** = set of 4 incisors **3** = Set of 2 cuspids, (**n/a for molars**)

Sender (Stamp):

Customer No.

Date, Signature

novo.lign P, multi-functional		Shades (classic A–D shade system)																
		BL3	A1	A2	A3	A3,5	A4	B1	B2	B3	B4	C1	C2	C3	C4	D2	D3	D4
Veneers, posterior G 3	REF	BL3	A10	A20	A30	A35	A40	B10	B20	B30	B40	C10	C20	C30	C40	D20	D30	D40
1G3 1. quadrant (14, 15, 16, 17)	VO1G3 _ _ _																	
2G3 2. quadrant (24, 25, 26, 27)	VO2G3 _ _ _																	
3G3 3. quadrant (34, 35, 36, 37)	VU3G3 _ _ _																	
4G3 4. quadrant (44, 45, 46, 47)	VU4G3 _ _ _																	
Veneers, posterior G4																		
1G4 1. quadrant (14, 15, 16, 17)	VO1G4 _ _ _																	
2G4 2. quadrant (24, 25, 26, 27)	VO2G4 _ _ _																	
3G4 3. quadrant (34, 35, 36, 37)	VU3G4 _ _ _																	
4G4 4. quadrant (44, 45, 46, 47)	VU4G4 _ _ _																	
Veneers posterior W3																		
1W3 1. quadrant (14, 15, 16, 17)	VO1W3_ _ _																	
2W3 2. quadrant (24, 25, 26, 27)	VO2W3_ _ _																	
3W3 3. quadrant (34, 35, 36, 37)	VU3W3_ _ _																	
4W3 4. quadrant (44, 45, 46, 47)	VU4W3_ _ _																	
Veneers posterior W4																		
1W4 1. quadrant (14, 15, 16, 17)	VO1W4_ _ _																	
2W4 2. quadrant (24, 25, 26, 27)	VO2W4_ _ _																	
3W4 3. quadrant (34, 35, 36, 37)	VU3W4_ _ _																	
4W4 4. quadrant (44, 45, 46, 47)	VU4W4_ _ _																	
Veneers posterior W5																		
1W5 1. quadrant (14, 15, 16, 17)	VO1W5_ _ _																	
2W5 2. quadrant (24, 25, 26, 27)	VO2W5_ _ _																	
3W5 3. quadrant (34, 35, 36, 37)	VU3W5_ _ _																	
4W5 4. quadrant (44, 45, 46, 47)	VU4W5_ _ _																	

visio.lign veneer system Set 2	REF	Shade
10 x novo.lign A, 8 x novo.lign P, 1 x combo.lign, 1 x mixing cannulas, 1 x visio.link, 21 pieces, shade at customer' s option	VLIGNSET2	

visio.lign veneer system Set 3	REF	Shade
such as VLIGNSET2, 2 x crea.lign, 2x Opaquer combo.lign, 12 (instead 10) x novo.lign A, 27 pieces, shade at customer' s option	VLIGNSET3	

Please enter the order quantity.

Sender (Stamp):

Customer No.

Date, Signature

combo.lign		BL3	A1	A2	A3	A3,5	A4	B1	B2	B3	B4	C1	C2	C3	C4	D2	D3	D4
REF		BL3	A10	A20	A3	A35	A40	B10	B20	B30	B40	C10	C20	C30	C40	D20	D30	D40
Fixation composite, 8 g	CO2x4 _ _ _																	
Mixing cannulas combo.lign, 10 pieces	COMKG210																	

combo.lign tooth-colored	Cont.	REF	Quantity
Composite, dual-curing	8 g	CO2X4GUM	

combo.lign Opaquer	Cont.	REF	Quantity
light for A1 / A2 / A3 / B2	4 g	CO1X4OPL	
medium for A3,5 / B3 / D3	4 g	CO1X4OPM	
intensive for A4 / C3	4 g	CO1X4OPI	
GUM	4 g	CO1X4OPG	
Catalyst for all shades	4 g	CO1X4KAT	
all 4 shades + 2 x cat	6 x 4 g	OLIGNSET1	

visio.link	Cont.	REF	Quantity
PMMA & Composite Primer	10 ml	VLPMMA10	

MKZ Primer	Cont.	REF	Quantity
Metal and zirconium oxide primer	4 ml	MKZ02004	

MKZ EM-Aktivator	Cont.	REF	Quantity
Activator for precious metal frameworks	4 ml	MKZEM004	

K-Primer	Cont.	REF	Quantity
Veneering ceramic primer	3 ml	PPK25003	

visio.sil silicone for keys	Cont.	REF	Quantity
visio.sil transparent	50 ml	540 0120 0	
visio.sil ILT transparent	50 ml	540 0140 0	
Mixing cannulas (G4) visio.sil/visio.sil ILT	12 pcs.	320 0045 7	
visio.sil fix, high-precision	50 ml	540 0130 0	
Mixing cannulas (G2) visio.sil fix	12 pcs.	320 0045 1	

beauty setup wax	Cont.	REF	Quantity
tooth-colored, light	25 g	430 0030 0	
tooth-colored, dark	25 g	430 0031 0	

visio.lign Toolkit	Cont.	REF	Quantity
Composite processing kit	10 pcs.	VLTOOLKIT	

Accessories	Cont.	REF	Quantity
Dispenser 5 ml 1:1	1 pcs.	320 0044 1	
Grip vor one-hand use crea.lign syringe	1 pcs.	320 0044 2	
crea.lign Syringe holder (Tray)	1 pcs.	320 0044 3	
Applikation cannulas	10 pcs.	320 0094 0	
crea.lign Modelling Liquid	10 ml	CLFMOD10	
Thermo-Pen	1 pcs.	110 0147 0	

Please enter the order quantity.

Sender (Stamp):

Customer No.

Date, Signature

crea.lign	Cont.	REF	Quantity
crea.lign Dentin BL3	5 g	CLFNDBL3	
crea.lign Dentin A1	5 g	CLFNDA10	
crea.lign Dentin A2	5 g	CLFNDA20	
crea.lign Dentin A3	5 g	CLFNDA30	
crea.lign Dentin A3,5	5 g	CLFNDA35	
crea.lign Dentin A4	5 g	CLFNDA40	
crea.lign Dentin B1	5 g	CLFNDB10	
crea.lign Dentin B2	5 g	CLFNDB20	
crea.lign Dentin B3	5 g	CLFNDB30	
crea.lign Dentin B4	5 g	CLFNDB40	
crea.lign Dentin C1	5 g	CLFNDC10	
crea.lign Dentin C2	5 g	CLFNDC20	
crea.lign Dentin C3	5 g	CLFNDC30	
crea.lign Dentin C4	5 g	CLFNDC40	
crea.lign Dentin D2	5 g	CLFNDC10	
crea.lign Dentin D3	5 g	CLFNDC20	
crea.lign Dentin D4	5 g	CLFNDC30	
crea.lign Incisal E1	5 g	CLFN00E1	
crea.lign Incisal E2	5 g	CLFN00E2	
crea.lign Incisal E3	5 g	CLFN00E3	
crea.lign Incisal E4	5 g	CLFN00E4	
crea.lign Incisal opal	5 g	CLFN00I1	
crea.lign Incisal blue	5 g	CLFN00I2	
crea.lign Incisal rose	5 g	CLFN00I3	
crea.lign Incisal universal	5 g	CLFN00I4	
crea.lign GUM light	5 g	CLFN00G1	
crea.lign GUM rosa	5 g	CLFN00G2	
crea.lign GUM pink	5 g	CLFN00G3	
crea.lign Modifier beige	5 g	CLFN00M1	
crea.lign Modifier oliv	5 g	CLFN00M2	
crea.lign Modifier caramel	5 g	CLFN00M3	
crea.lign Modifier lila	5 g	CLFN00M4	
crea.lign Stain orange	1,4 g	CLFN00S1	
crea.lign Stain brown	1,4 g	CLFN00S2	

Accessories	Cont.	REF	Quantity
crea.lign Modelling Liquid	10 ml	CLFMOD10	

crea.lign Opake		Cont.	REF	Quantity
crea.lign Opake 1	A1 / B2	4 g	CLFHOP1	
crea.lign Opake 2	A2	4 g	CLFHOP2	
crea.lign Opake 3	A3 / D3	4 g	CLFHOP3	
crea.lign Opake 4	BL3 / B1 / C1	4 g	CLFHOP4	
crea.lign Opake 5	C2 / C3 / D2 / D4	4 g	CLFHOP5	
crea.lign Opake 6	B3 / B4	4 g	CLFHOP6	
crea.lign Opake 7	A3,5	4 g	CLFHOP7	
crea.lign Opake 8	A4 / C4	4 g	CLFHOP8	
crea.lign Opake GUM		4 g	CLFHOGUM	

crea.lign Starter kit																	Cont.	REF			Quantity
syringes a 5 g each (at customer's option)																	10 pcs.	CLIGNSETN			
DBL3	DA1	DA2	DA3	DA3,5	DA4	DB2	DB3	DB4	DC2	DC3	DD2	DD3	DD4	E2	E3	opal	blue	univ	G1	G2	G3

crea.lign Starter kit with syringe holder																		Cont.	REF				Quantity
syringes of 5 g each, 2 x Stain, Modelling Liquid, Syringe holder, 12 x single-hand grip																	12 pcs.	CLIGNSET12					
DBL3	DA1	DA2	DA3	DA3,5	DA4	DB2	DB3	DB4	E2	E3	opal	blue	univ	rose	M1	M2	M3	M4	G1	G2	G3		

Please enter the order quantity.

syringes a 5 g, 2 x Stain, Modelling Liquid, Syringe holder, 12 x single-hand grip

Sender (Stamp):

Customer No.

Date, Signature

neo.lign A		Shades (classic A-D shade system)																
		BL3	A1	A2	A3	A3,5	A4	B1	B2	B3	B4	C1	C2	C3	C4	D2	D3	D4
Anterior teeth upper anterior	REF	BL3	A10	A20	A30	A35	A40	B10	B20	B30	B40	C10	C20	C30	C40	D20	D30	D40
C43 Set of 6 (13, 12, 11, 21, 22, 23)	TOC43 _ _ _ S																	
A44 Set of 6 (13, 12, 11, 21, 22, 23)	TOA44 _ _ _ S																	
I45 Set of 6 (13, 12, 11, 21, 22, 23)	TOI45 _ _ _ S																	
S46 Set of 6 (13, 12, 11, 21, 22, 23)	TOS46 _ _ _ S																	
I47 Set of 6 (13, 12, 11, 21, 22, 23)	TOI47 _ _ _ S																	
D48 Set of 6 (13, 12, 11, 21, 22, 23)	TOD48 _ _ _ S																	
M48 Set of 6 (13, 12, 11, 21, 22, 23)	TOM48 _ _ _ S																	
D49 Set of 6 (13, 12, 11, 21, 22, 23)	TOD49 _ _ _ S																	
B51 Set of 6 (13, 12, 11, 21, 22, 23)	TOB51 _ _ _ S																	
Anterior teeth lower anterior																		
T35 Set of 6 (43, 42, 41, 31, 32, 33)	TUT35 _ _ _ S																	
D38 Set of 6 (43, 42, 41, 31, 32, 33)	TUD38 _ _ _ S																	
D41 Set of 6 (43, 42, 41, 31, 32, 33)	TUD41 _ _ _ S																	

neo.lign P multi-functional		Shades (classic A-D shade system)																
		BL3	A1	A2	A3	A3,5	A4	B1	B2	B3	B4	C1	C2	C3	C4	D2	D3	D4
Posterior teeth posterior G 2	REF	BL3	A10	A20	A30	A35	A40	B10	B20	B30	B40	C10	C20	C30	C40	D20	D30	D40
1G2 1. quadrant (14, 15, 16, 17)	TO1G2 _ _ _																	
2G2 2. quadrant (24, 25, 26, 27)	TO2G2 _ _ _																	
3G2 3. quadrant (34, 35, 36, 37)	TU3G2 _ _ _																	
4G2 4. quadrant (44, 45, 46, 47)	TU4G2 _ _ _																	
Posterior teeth posterior G 3																		
1G3 1. quadrant (14, 15, 16, 17)	TO1G3 _ _ _																	
2G3 2. quadrant (24, 25, 26, 27)	TO2G3 _ _ _																	
3G3 3. quadrant (34, 35, 36, 37)	TU3G3 _ _ _																	
4G3 4. quadrant (44, 45, 46, 47)	TU4G3 _ _ _																	
Posterior teeth posterior G 4																		
1G4 1. quadrant (14, 15, 16, 17)	TO1G4 _ _ _																	
2G4 2. quadrant (24, 25, 26, 27)	TO2G4 _ _ _																	
3G4 3. quadrant (34, 35, 36, 37)	TU3G4 _ _ _																	
4G4 4. quadrant (44, 45, 46, 47)	TU4G4 _ _ _																	

neo.lign P lingualized		Shades (classic A-D shade system)																
		BL3	A1	A2	A3	A3,5	A4	B1	B2	B3	B4	C1	C2	C3	C4	D2	D3	D4
Posterior teeth posterior L 2	REF	BL3	A10	A20	A30	A35	A40	B10	B20	B30	B40	C10	C20	C30	C40	D20	D30	D40
L2 UJ (14, 15, 16, 17/24, 25, 26, 27)	TOWL2 _ _ _																	
L2 LJ (34, 35, 36, 37/44, 45, 46, 47)	TUWL2 _ _ _																	
Posterior teeth posterior L 3																		
L3 UJ (14, 15, 16, 17/24, 25, 26, 27)	TOWL3 _ _ _																	
L3 LJ (34, 35, 36, 37/44, 45, 46, 47)	TUWL3 _ _ _																	
Posterior teeth posterior L 4	_ _ _ _ _ _																	
L4 UJ (14, 15, 16, 17/24, 25, 26, 27)	TOWL4 _ _ _																	
L4 LJ (34, 35, 36, 37/44, 45, 46, 47)	TUWL4 _ _ _																	

Design chart neo.lign	REF	Shade
24 pcs. (12 x neo.lign A, 12 x neo.lign P), shade at customer' s option	VLIGNPRVTI	

neo.lign Upgrade Kit	REF	Shade
24 pcs. (12 x neo.lign A, 12 x neo.lign P), shade at customer' s option	NULPSET2	

Please enter the order quantity.

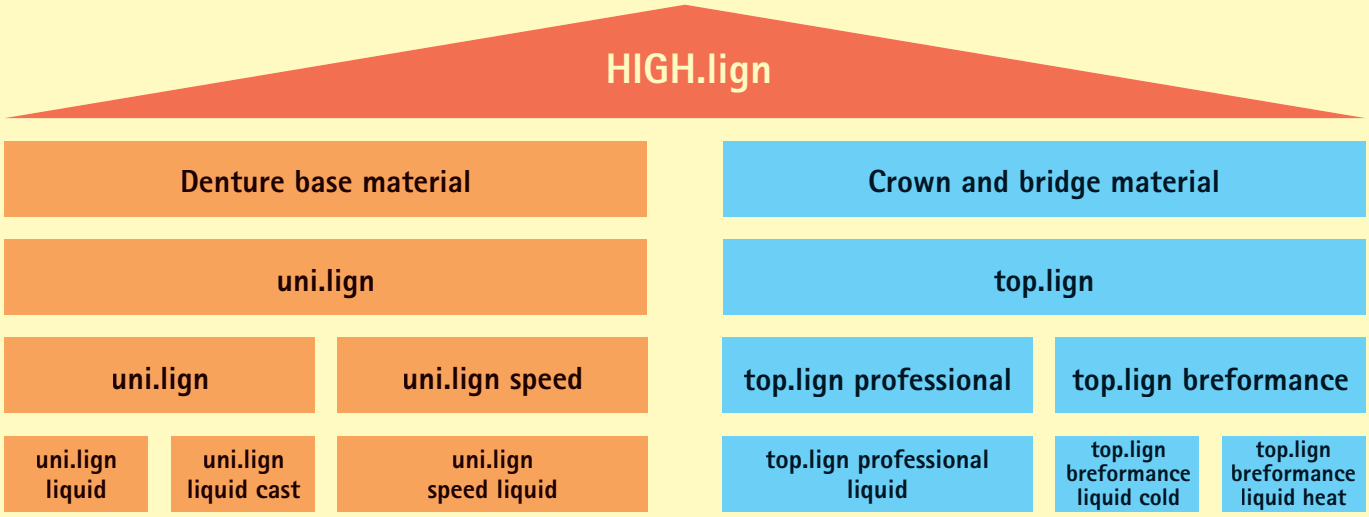
Sender (stamp):

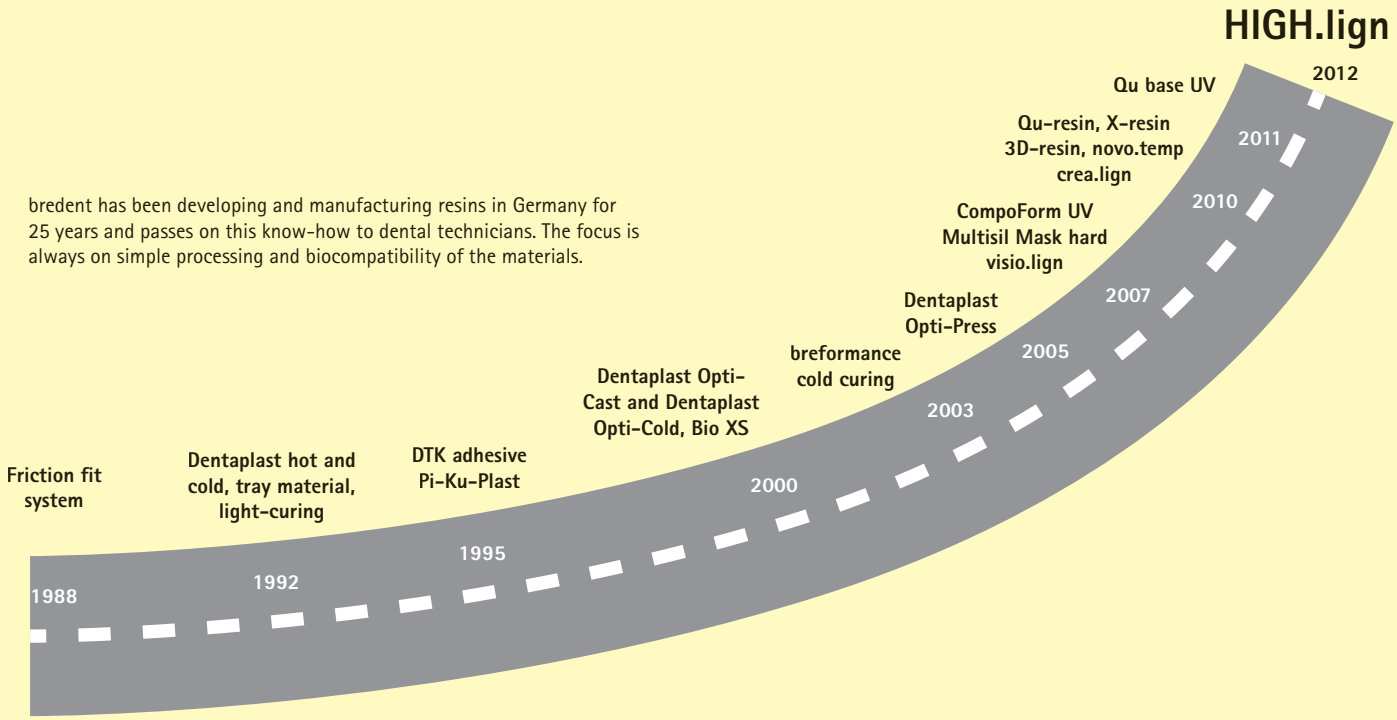
Customer No.

Date, Signature

HIGH.lign

HIGH.lign – the resin for the future!
The new HIGH.lign series of resins includes uni.lign as a high-quality denture resin and top.lign as a crown and bridge material. The resins of the uni.lign group offer dental technicians a harmonized range of cold-curing denture resins for top-quality dentures, which can be fabricated using teeth from the visio.lign veneering system. The innovative uni.lign speed repair resin enables repairing restorations within a short time. top.lign breformance is used for the fabrication of high-quality long-term temporaries. top.lign professional is a material to prepare permanent restorations. All resins offer outstanding mechanical properties and performance for the respective indication.





bredent has been developing and manufacturing resins in Germany for 25 years and passes on this know-how to dental technicians. The focus is always on simple processing and biocompatibility of the materials.

uni.lign

Top quality for sophisticated dentures
Thanks to the innovative formula and a new manufacturing process, the requirements of DIN EN ISO 20795-I are exceeded by far. As a result, denture resins with exceptional mechanical properties are produced which comply with the latest standards. Exclusively high-quality raw materials, which fulfill the stringent requirements of bredent, are processed to achieve utmost and consistent quality and shade stability. Consistent quality is ensured by comprehensive in-house controls for each production lot.

Simple processing in the laboratory and harmonization of the individual resins ensure ease of use and a high level of comfort for dental technicians. The optimized modulus of elasticity, high flexural strength and resistance to discoloration lead to durable restorations for patients. The low residual monomer content and excellent polishing properties (plaque resistance) guarantee outstanding compatibility.

The use of crea.lign enables esthetic individualization in particular when fabricating implant-supported restorations and underlines the laboratory's competence.



Lab. Od. Lazetera Antonio - Savona - Italy
Dott. Vescia Luca –Villa Dossola - Italy



Lab. Od. Lazetera Antonio - Savona - Italy

Three different shades provide more flexibility. Three levels from transparent to opaque and three veined shades enable perfect reproduction of the gingiva for partial dentures.



uni.lign PC 10



uni.lign PC 20



uni.lign PC 30



uni.lign PF 10



uni.lign PF 20



uni.lign PF 30

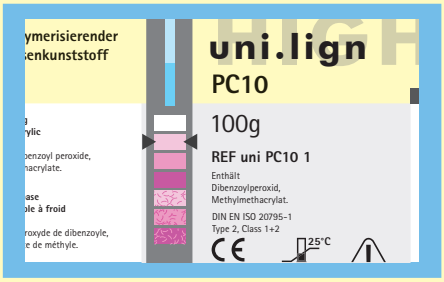
Information on ordering on page 325

uni.lign

Cold-curing denture base material
uni.lign consists of a powder component in the respective shade/color which is either mixed with uni.lign liquid or uni.lign liquid cast in accordance with application-specific characteristics. As a result, the processing time span can be varied and additional options for the fabrication process of dentures are obtained.

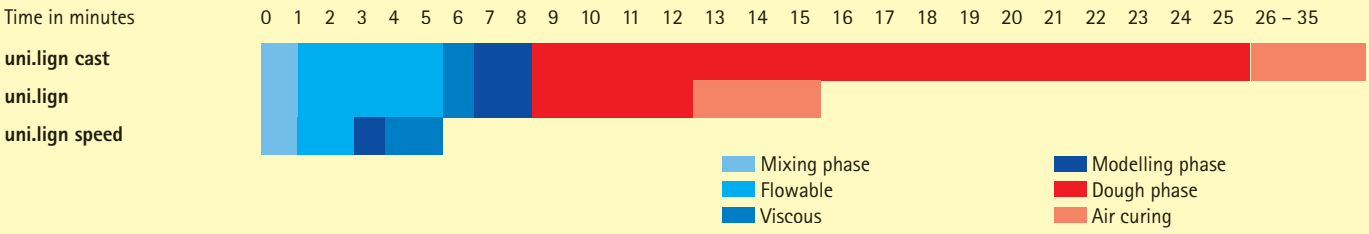


Three different package sizes - from the convenient small package (70 g) to the large refill package (1000 g).



Easily distinguishable and clear labelling of the resins. Systematic and clear designation of the shade prevents mixing up the different colors.

The various liquids
Compared to uni.lign liquid, the modelling phase can be extended when using uni.lign liquid and a wide range of processing options is obtained. Large dentures or the Opti-Cast flask can be cast without any bubbles and working stress is eliminated.



Indication – uni.lign with uni.lign liquid



Completion of CoCr dentures.



Relinings and shaping of functional margins.



Any type of repair work, such as cracks, fractures, etc.

Indication – uni.lign with uni.lign liquid cast



Fabrication of full dentures in the resin casting technique.



Completion of CoCr dentures.

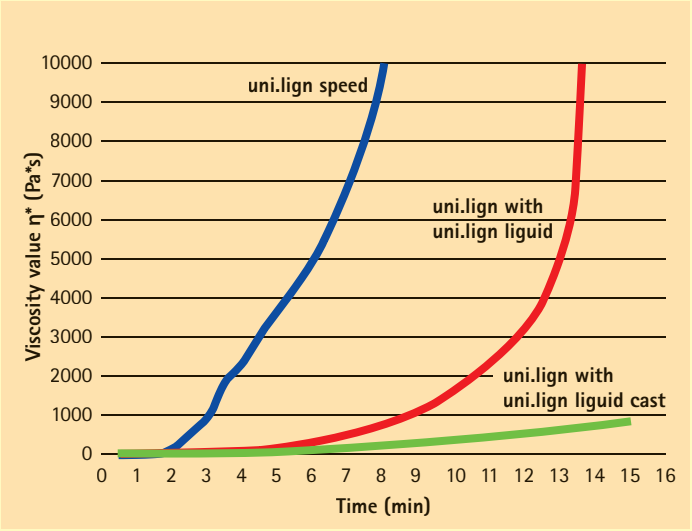


Relinings and shaping of functional margins.

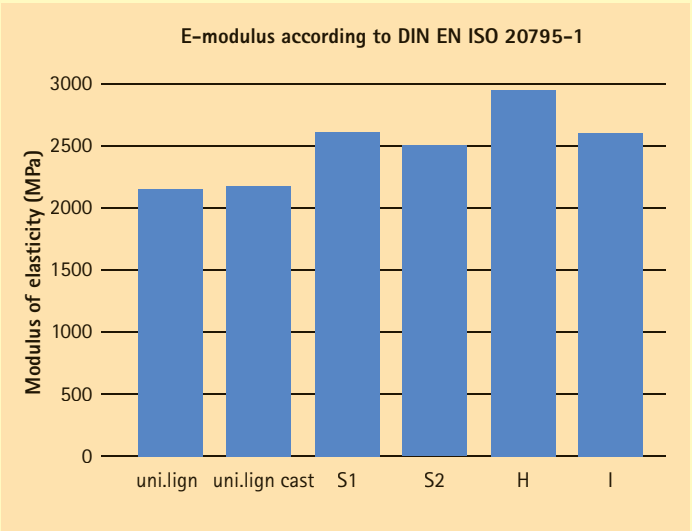


Any type of repair work, such as cracks, fractures, etc.

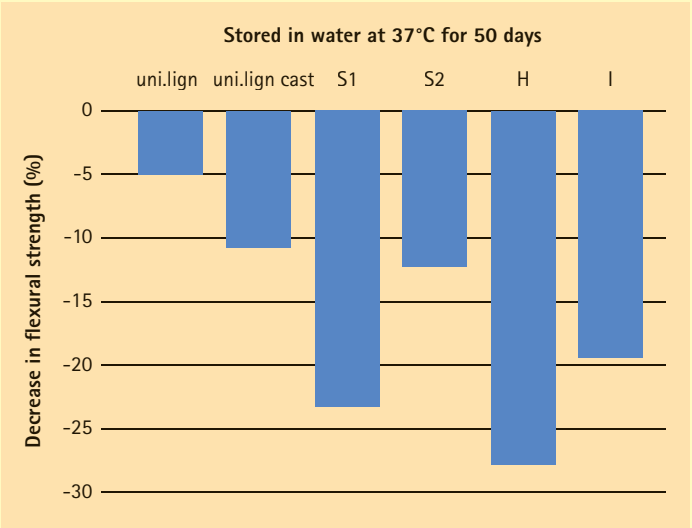
uni.lign



Cold-curing denture base material
The swelling behavior clearly indicates that the use of uni.lign liquid cast mixing liquid slowly dissolves the resin beads and hence the processing time is extended. The use of uni.lign liquid, however, accelerates swelling of the resin beads so that a shorter processing time for repairs, relinings or small saddles is obtained.



An optimum modulus of the elasticity results in a more flexible denture, minimizes the tendency to fracture and increases the reliability for the patient.



Surface density optimized for the respective indication and very low water absorption contribute to retarding the ageing process of the uni.lign resins and ensuring a high quality standard and extended durability. Moreover, excellent shade stability guarantees that the esthetic appearance is preserved throughout the life of the denture.

uni.lign speed

Fast-curing repair resin
Performing repairs, extensions and fabricating small saddles with uni.lign speed - these types of work can be done since the new resin has a short swelling time which does not affect the mechanical values.



Since it has been matched with the uni. lign colors, uni.lign speed enables repairs or extensions with no difference in color.



The short pouring time (1 minute) and the extremely short polymerization time of only 5 minutes allow fast further processing so that considerable time can be saved.



The modelling phase of 2 minutes enables accurate application of the resin and hence reduces the time required for finishing the cured resin.

Overview of the uni.lign resins



	uni.lign			uni.lign speed	
	70 g	500 g	1000 g	70 g	500 g
PC 10	uniPC101	uniPC102	uniPC103	unispc11	unispc15
PC 20	uniPC201	uniPC202	uniPC203	unispc21	unispc25
PC 30	uniPC301	uniPC302	uniPC303	unispc31	unispc35
PF 10	uniPF101	uniPF102	uniPF103	–	–
PF 20	uniPF201	uniPF202	uniPF203	–	–
PF 30	uniPF301	uniPF302	uniPF303	–	–
TC 10	uniTC101	uniTC102	uniTC103	–	–



uni.lign liquid			uni.lign liquid cast			uni.lign speed liquid	
100 ml	500 ml	1000 ml	100 ml	500 ml	1000 ml	100 ml	500 ml
unil0100	unil0500	unil1000	unilc100	unilc500	unilc000	unisplq1	unisplq5

top.lign professional

top.lign professional
Discoloration-resistant powder-liquid system for fast and simple fabrication of long-term temporaries or permanent restorations.
Particularly suitable for immediate large-span bridges based on the fast & fixed system by bredent. The high density enables quick and excellent polishing. The high gloss avoids adhesion of plaque and extends the period of wearing. As a result, the reliability is increased during the healing phase of the implants.

Application examples



Implant-supported, screw-retained SKY fast & fixed bridge.



Pouring of the implant-supported bar restoration with top.lign professional.



Clasp-retained dentures.



Completed implant-supported bar restoration.

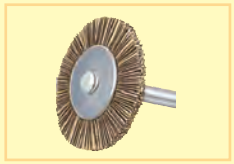


top.lign professional liquid
100 ml
REF tlp liq0 1

Accessories:



Isoplast ip
750 ml
REF 540 0101 9



Round brush Rodeo
15 pieces, Ø 18 mm
REF 350 0096 0

top.lign professional	g	REF
1 dentine material A1	100	tlp DA10 1
1 dentine material A2	100	tlp DA20 1
1 dentine material A3	100	tlp DA30 1
1 dentine material A3,5	100	tlp DA35 1
1 dentine material A4	100	tlp DA40 1
1 dentine material B1	100	tlp DB10 1
1 dentine material B2	100	tlp DB20 1
1 dentine material B3	100	tlp DB30 1
1 dentine material B4	100	tlp DB40 1
1 dentine material C1	100	tlp DC10 1

Dentaclean impression and denture disinfectant



Disinfecting with Dentaclean impression and denture disinfectant avoids the transmission of viruses, bacteria and fungi – from the patient to the laboratory. The concentrate is mixed to obtain 10 liters of ready-to use solution which is highly effective and has a surprisingly mild odor.

Dentaclean impression and denture disinfectant
1000 ml concentrate to obtain
10 liters ready-to-use solution
incl. 25 shipping bags
REF 520 0100 6

Tested and approved by the Institute for clinical hygiene and infection control, Giessen.



Pathogens can be transmitted to the laboratory with impressions.



After the use of Dentaclean impression disinfectant, active viruses, bacteria and fungi can no longer be detected.

Shipping bags



The shipping bags have already been labeled „disinfected". Additionally, a separate bag holds the refte to protect them against moisture.

Shipping bags
200 pieces
REF 520 0100 2

Dentaclean denture cleaning agent



Konzentrat zur mühelosen Entfernung von Plaque, Zahnstein und Belägen auf Prothesen.

Dentaclean denture cleaning agent
1000 ml concentrate to obtain
11 liters ready-to-use solution
REF 520 0099 2



Up to now the removal of tartar has been difficult and could often only be achieved through grinding. This is unpleasant and takes a lot of time.



Now high-quality concentrate components in Dentaclean denture cleaning agent remove difficult coatings from dentures safely and quickly within only 15 minutes.



Contaminated dentures are unpleasant and require a lot of time for cleaning.



Dentures can be quickly and easily cleaned with Dentaclean denture cleaning agent.

Dentaclean ultrasonic cleaning agent



Concentrate for removal of polishing paste residues.
Mild odor, powerful cleaning capacity.



Cleaning of polishing contaminations takes a lot of time. Therefore aggressive agents that are injurious to health are frequently used.



Matched surfactants and emulsifiers remove contaminations carefully and quickly thus saving time for the technician.

Dentaclean ultrasonic cleaning agent
1000 ml concentrate to obtain
11 liters ready-to-use solution
REF 520 0099 7

Dentaclean plaster removing agent / Dentaclean plaster removing agent Speed



Ready-to-use solution to remove plaster residues from all surfaces.
The Dentaclean plaster removing agent is available in two types: normal and Speed. The ready-to-use solution removes plaster residues from all surfaces. If no time is to be wasted, Dentaclean Speed should be used.

Dentaclean plaster removing agent
1000 ml
REF 520 0011 9

2500 ml
REF 520 0099 3

Dentaclean plaster removing agent Speed
1000 ml
REF 520 0101 0

2500 ml
REF 520 0099 4



Hard plaster particles are carefully removed from the mixing bowl without any damage.



Gentle and fast removal of plaster protects the acrylic surface and the color.

Dentaclean mixing fluid for pumice powder



Protects against germs.

Dentaclean mixing fluid for pumice powder
- Remains moist and free of germs for two to three weeks without having to be remixed.
- Contains skin-care additives to protect employees' hands.
- Contains natural odours which still smell fresh after several weeks.
- Mixed polish adheres to the brush and re-storstion better so that the pumice splatters less. This saves time when polishing as the pumice slurry does not have to be applied repeatedly

Dentaclean mixing fluid for pumice powder
5000 ml
REF 520 0099 8

Dentaclean mixing fluid for pumice powder
1000 ml
REF 520 0099 9

Application:
Simply mix the pumice powder with Dentaclean mixing fluid for pumice powder, do not add water. This way the pumice powder stays moist for two to three weeks.



In wet punmise powder disease microbs are present. Disinfection action occures within one hour.



The nurturing effect for the skin is acheived by skin nurturing addative.

Ergonom wax knife



Modelling knife for dental prosthetics.
Various instruments all in one – hence instruments do not need to be changed any longer so that faster and more efficient processing of the wax model is possible.
Ergonomic design of handle - suitable for right- and left-hand users.

Ergonom
Wax knife
REF 310 0001 3



Special, ground edge of the knife tip for simple and fast modelling of age-specific papillae shapes.



The spoon which features a ground edge is perfectly suitable for modelling the alveolar area.



The deep spoon perfectly allows to apply large wax quantities within a very short time.



Well-aimed, fast application of wax reduces the time for remodelling in the interdental area.



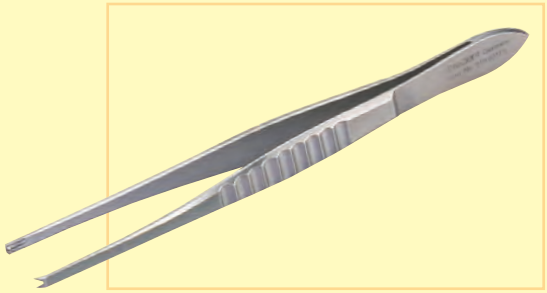
Transitions towards the functional margin and the functional margin itself can be prepared swiftly and neatly thanks to the curved design of the spoon element.





With the Ergonom wax knife, wax models can be easily and quickly shaped so that a natural appearance is obtained.

Repositioning tweezers





- special pincer tips for secure holding
- pincer tips of hardened material for a long working life
- no slipping of small parts – no irritating searching
- fine tips for narrow areas

Secure holding of plastic and ceramic teeth during repositioning in the cuvette and boiling-out. The special pincer tips of the tweezers take secure hold of teeth and other small parts and permit fast working.

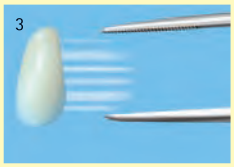


The pointed pincer tips permit secure holding of teeth and other small parts.



The special and well designed denticulation of the pincers provides optimal hold security.

Repositioning tweezers
1 piece
REF 310 0011 5



Secure holding of teeth is not possible with normal tweezers. Time-consuming searching is eliminated.



Small parts such as screws or attachments are gripped easily and securely. A useful instrument particularly for implantology.



On completion there is always a problem – the repositioning of the teeth! The special fine pincers at the tweezers tips permit secure gripping of the teeth.

Thermo-syringe





After heating, the adhesive acrylic wax is directly applied onto the glueing point using the Thermo-syringe. Firm bonding is ensured.



The adhesive acrylic wax can be applied onto any type of material. Afterwards it can be removed from the objects without leaving any residues.

Accessories:



Adhesive acrylic wax
Pack cont. 250 g **REF 510 0070 1**

Bucket cont. 1000 g **REF 510 0070 0**

Thermo-syringe
REF 110 0121 1

Fixing and glueing that can be dissolved without any residues for any type of model situation.
The adhesive acrylic wax can be moulded by heating and easily applied to the models.

Posi-boy



The perfect „third hand" to hold any model in the desired position.
Posi-boy simplifies processing of cold-curing acrylics. The solid metal base ensures firm stand and the correct position in the pressure pot. No tilting, no leaking of acrylics, no change of pre-shaped saddles.

Posi-boy
REF 360 0101 0

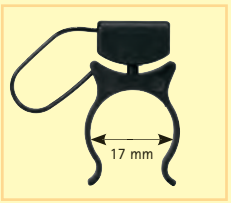


The corrosion-resistant V2 A material guarantees a long service life for the Posi-boy and keeps the acrylics „in shape" in any pressure pot. Thanks to its robust design and the individual adjustment options, firm hold of the model is ensured.

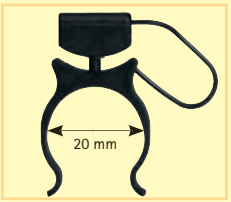
Articulation paper holder



Repeated taking up and placing down the handpiece and articulation paper are no longer required. Grinding in a flick of the wrist!

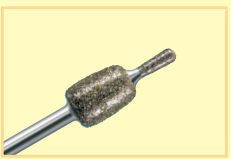


Articulation paper holder size 1
1 piece
REF 360 0121 7



Articulation paper holder size 2
1 piece
REF 360 0122 0

Acessories:



Set-up grinding tool
1 piece
REF 340 0101 0

Wax insulating agent



Wax insulating liquid wis with brush pen pk 20
750 ml
REF 540 0070 4

Accessories:



Plastic spray bottle sp
125 ml
REF 540 0075 0



Brush pen pk 20
20 ml
REF 540 0072 0

Microfeine Isolierflüssigkeit für alle Wachsmodellationen. Isoliert Gips, Kunststoff, Metall und sogar Wachs gegen Wachs.



The brush pen allows to apply defined quantities of the wax insulating liquid to the desired areas of the model.



After waxing-up the saddles, the pattern can be removed from the model without any damage.

Plaster insulating agent



Plaster insulating agent
750 ml
REF 540 0013 5

Accessories:



Plastic spray bottle sp
125 ml
REF 540 0075 0



Brush pen pk 20
20 ml
REF 540 0072 0

For reliable insulation of plaster against plaster.
Alginate-based plaster insulating liquid which ensures gap-free fit. For utmost precision and separating of sawcut models without any damage.



The plaster insulating liquid soaks into the plaster and seals the surface without layering. The brush pen allows quick application.



The plaster insulating liquid allows separating the two flask halves without any damage.



Isoplast ip



Plaster-acrylic insulating liquid for all cold- and hot-curing acrylics.



The desired quantity of Isoplast can be applied to ensure economic use.

Isoplast ip
750 ml
REF 540 0101 9

Accessories:



Brush pen pk 125
125 ml
REF 390 0033 0



The plaster-acrylic insulating liquid seals the surface. This way precise impressions are ensured.



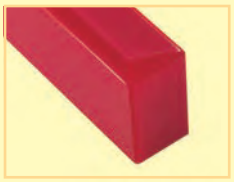
Isoplast allows to obtain extremely smooth, shining acrylic surfaces. The finishing time is reduced.



Bite blocks



Prefabricated wax bite blocks – available in the shape of jaws or rods featuring different degrees of hardness.



The basal profile of the bite blocks allows time-saving adaptation on the base plate.



Bite blocks bw
rods
medium, red
104 pieces
14 x 8 x140 mm
REF 430 0023 0



medium, red, UJ/LJ
74 pieces
REF 430 0022 0

medium, red, UJ
74 pieces
REF 430 0020 0

medium, red, LJ
74 pieces
REF 430 0021 0



hard, yellow, UJ/LJ
74 pieces
REF 430 0017 0

hard, yellow, UJ
74 pieces
REF 430 0015 0

hard, yellow, LJ
74 pieces
REF 430 0016 0



soft, pink
104 pieces
14 x 8 x140 mm
REF 430 0028 0



soft, pink, UJ/LJ
74 pieces
REF 430 0027 0

soft, pink, UJ
74 pieces
REF 430 0025 0

soft, pink, LJ
74 pieces
REF 430 0026 0



super-hard, white, UJ/LJ
74 pieces
REF 430 0012 0

super-hard, white, UJ
74 pieces
REF 430 0010 0

super-hard, white, LJ
74 pieces
REF 430 0011 0



hard, yellow
104 pieces
14 x 8 x140 mm
REF 430 0018 0

super-hard, white
104 pieces
14 x 8 x140 mm
REF 430 0013 0

The height and the width of prefabricated bite blocks are suitable for the use on partial dentures.



Prepare situation model in the usual way.



The basal profile of the bite block simplifies adapting on the base plate.



The consistency of the bite blocks allows simple reduction of the height and width using the wax knife.



The prefabricated wax bite block can be easily integrated.



Since additional application of wax to the buccal and lingual area is no longer required, a considerable amount of time and material can be saved.



The high stability and functional processing of the bite blocks ensures precise bite-taking.

Set-up wax asw



For setting up and changing the position of acrylic teeth without heating.



Set-up wax asw 4
pink
220 g
REF 430 0157 4



Set-up wax asw 5
pink
220 g
REF 430 0152 0



Set-up wax asw 3
pink
220 g
REF 430 0151 0



Three different sizes of the pink set-up wax allow the individual use.



Thanks to its consistency the set-up wax can be perfectly processed without being heated.

Assortment

Set-up wax asw
pink, 220 g
1 each asw 3, 4, 5
REF 430 0149 0



The set-up wax allows quick adapting on the base plate.



No additional wax is required for flushing of the set-up wax.



Due to the adhesive capacity of the set-up wax, acrylic teeth are fixed prior to waxing on.



Even after waxing on, acrylic teeth can be brought into any individual position.

Modelling wax pink Standard mdwst



Modelling waxes in sheets are used for a large number of applications in denture work.

Modelling wax pink Standard mdwst sheets.

Two thicknesses and three different qualities provide the technician with individual processing options.

Sheet thickness
1.25 mm
quantity 1000 g
75 x 150 x 1.25 mm

soft, pink	**REF 430 0164 3**
medium, pink	**REF 430 0164 2**
hard, pink	**REF 430 0164 1**

Sheet thickness
1.50 mm
quantity 1000 g
75 x 150 x 1.5 mm

soft, pink	**REF 430 0164 6**
medium, pink	**REF 430 0164 5**
hard, pink	**REF 430 0164 4**



Due to the particular stability of the pink modelling wax sheets, sufficient stability for the base plates is provided.



By rolling up the wax sheets and waxing them to the base plate, acrylic teeth can be set up immediately.



Bite blocks can be easily produced by rolling up and kneading this modelling wax.



The structure of the pink modelling wax sheets allows easy blocking-out for individual trays.

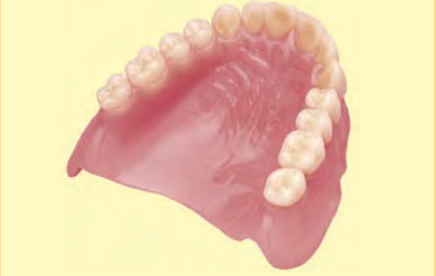


Even during extended try-in, the original stability of this modelling wax is maintained.

Wax palatal patterns gf



More quality, function and esthetics within a short time.
The recesses for the acrylic teeth simplify adapting of the pre-shaped wax palatal patterns to the situation.



Assortment

Wax palatal patterns gf
120 pieces,
30 pieces each

0.5 mm A, B
1.5 mm A, B

REF 430 0218 0



The use of wax palatal patterns for the wax set-up simplifies modelling and saves time.



Cut out the pink modelling wax and replace it by wax palatal patterns.



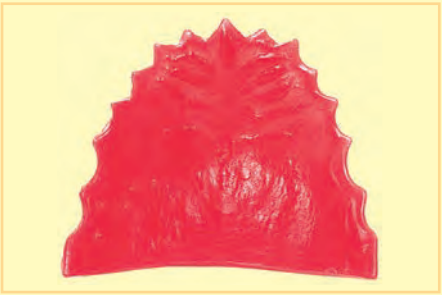
The pre-shaped wax palatal patterns can be easily adapted.



The transition of the wax palatal patterns to the approximal area can be perfectly designed with the fine modelling tip of the wax knife.



The natural function and esthetics of the palate is restored.



size A

0.5 mm 100 pieces **REF 430 0214 A**

1.5 mm 60 pieces **REF 430 0211 A**



size B

0.5 mm 110 pieces **REF 430 0215 B**

1.5 mm 70 pieces **REF 430 0212 B**

Tray material UV



Highly stable light-curing resin for trays and base plates.
The flexibility of the material allows easy placement onto the model without tearing. The required shape can be cut with an instrument. The pink color provides the perfect basis for the set-up.



Tray material UV
50 pieces UJ
REF 540 0011 0



Tray material UV
50 pieces LJ
REF 540 0011 1

Assortment

50 pieces
25 x Tray material UV - UJ
25 x Tray material UV - LJ
REF 540 0011 2



Tray material UV band
2.5 mm x 90 mm
1350 g
REF 540 0016 6

Tray material UV block
1000 g
REF 540 0011 3

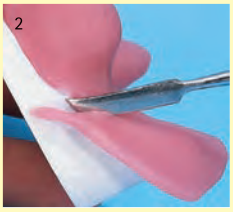
Accessories:



Polylux pl 20
Polylux polymerization unit with material container
(see page 251)
REF 140 0088 0



The high flexibility of the material simplifies the placement onto the model. The material will not be damaged.



The tray material can be precisely cut with any instrument. Accordingly, the amount of work is reduced.



Perfect adaptation to any situation guarantees uniform wall thicknesses.



Due to the high stability the position of the handle which has been determined will not be changed during the polymerization process.



The tray material has hardened after only 10 minutes in the Polylux unit.



The high stability of the tray material avoids deformation during impression taking. Precise models will be obtained.



The pink color offers the perfect basis for any type of set-up.



As a basic material for bite patterns or functional trays with bite rims, the resin ensures that the work will not be deformed.

casting system

Casting resin set



Flask
1 piece
REF 360 0125 7

Sealing plugs
20 pieces
REF 360 0125 8

Producing, finishing and polishing dentures with the least effort. The perfect flow characteristics and the well-matched processing times render Opti-Cast casting resin the first choice product. Due to the carefully selected raw materials, inaccuracy of fit is a matter of the past. The optimized material combination minimizes residual monomer.



Silicone plugs
3 pieces
REF 360 0125 9

Small punching tube
1 piece
REF 360 0126 0



Mixing cup maxi 1
80 ml
1 piece
REF 320 004M 1



Isoplast ip
750 ml
REF 540 0101 9



Measuring cup liquid
25 ml, 1 piece
REF 360 0126 2



Measuring cup powder
50 ml, 1 piece
REF 360 0126 3



Bre-Gel BG 3
4 x 400 ml
REF 540 0105 4

Assortment

uni.lign
1 flask
20 Sealing plugs
3 Silicone plugs
1 Small punching tube
1 Mixing cup maxi 1
1 Measuring cup liquid

1 Measuring cup powder
500 g uni.lign casting system powder
500 ml uni.lign casting system liquid
30 ml Isoplast ip

REF 360 0126 4

Assortment

uni.lign
1 flask
20 Sealing plugs
3 Silicone plugs
1 Small punching tube
1 Mixing cup maxi 1
1 Measuring cup liquid

1 Measuring cup powder
500 g uni.lign casting system powder
500 ml uni.lign casting system liquid
30 ml Isoplast ip

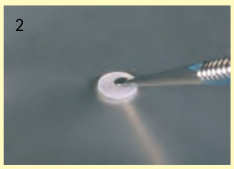
REF 360 0126 8

Bre-Gel BG 3 opaque liquid

Special duplicating gel for the economical production of dentures.



The model with the waxup is soaked.



To avoid low pressure when deflasking, the plug is inserted in the outside of the lower flask element.



The silicone plugs are pressed into the charging holes.



To ensure optimal positioning of the sprues, the model and the upper flask element are assembled as shown. A magnet in the base plate helps to hold the model.

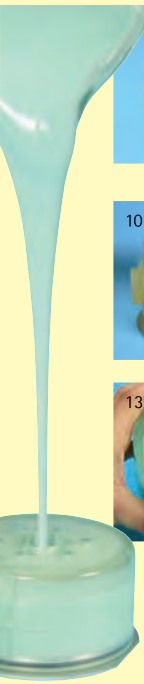


Shake duplicating gel to obtain homogeneous consistency



and then melt in the microwave for 3 min at 600 to 800 watt.

casting system





Stir Bre-Gel to achieve uniform heating. Melt two more minutes.



Excess pressure caused by boiling is avoided by the opened lid.



The flask is cooled in the cold water bath to 40-45 °C while stirring.



Pour Bre-Gel into the flask until the vents are slightly overfilled.



Final strength is reached after 45 minutes in the cold water bath.



The circumferential groove simplifies the removal of the upper flask element.



The model is carefully deflasked using compressed air.



The complex gingival model is reproduced in precise details.



Soak the model for 10 minutes before it is completed.



The charging hole and the vent are neatly punched with the small punching tube.





Before the teeth are placed back into the gel mould, they require circumferential ...



... and basal roughening with the setup grinding tool (REF 340 0101 0).



Thinly applied Isoplast (REF 540 0101 9) with short drying time ensures a perfect insulating film.



The model is placed back into the gel mould.



Die Silikonpfropfen verbleiben zur Stabilisierung bis zum Schließen der Követte in den Einfüllöffnungen.



The flask is closed in the correct position using a centering snap.



The flask is placed onto the flattened lower flask element. Opti-Cast casting resin can now be poured in from above.





Durch ein Hin- und Herschwenken der Küvette treten Lufteinschlüsse aus.



A delay in polymerization can be achieved with cold water. This way resin can flow during the polymerization phase.



The resin is polymerized in the pressure pot for 30 min at 40 to 50 °C and a pressure of 2-6 bars.

Multisil-Soft



The permanently soft relining system.

Multisil-Primer
5 ml
REF 520 0100 4



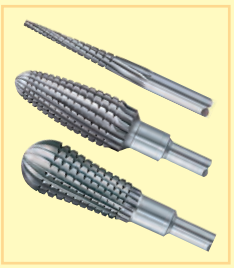
reliable bonding

The bonding agent is matched to the bond of denture resin and silicone.



ready-to-use

The flow characteristics allow rapid processing and applying through the dosing device.



Silicone burs
REF S187 QG 23
REF S263 QG 60
REF S237 QG 65



grindable

Silicone burs with a special cutting geometry simplify grinding of functional margins and transition zones.



Multisil sealing liquid
10 ml
REF 520 0100 5



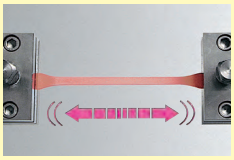
plaque-resistant

Multisil sealing agent avoids the accumulation of plaque to the surface and penetration of bacteria into the surface.



permanently elastic

Prolonged comfort of wear is a distinctive feature of the material.



tear-resistant

Highly cured materials create exceptional wear resistance and special tear resistance.



Dosing device
REF 320 0044 0

Assortment

Multisil-Soft

2 x 50 ml	Multisil-Soft in cartridges
5 ml	Multisil-Primer
10 ml	Multisil sealing liquid
12 pieces	Mixing cannulas
1 piece	Silicone burs S237 QG 65

REF 540 0104 5



Refill packages:

50 ml Multisil-Soft cartridges
REF 540 0104 6

5 ml Multisil-Primer
REF 520 0100 4

10 ml Multisil sealing liquid
REF 520 0100 5

12 St. Mixing cannulas yellow
REF 320 0045 1

Ropak UV



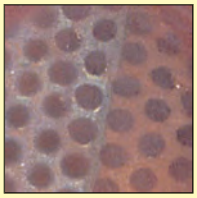
Light curing acrylic-colored opaque to coat CoCr objects.

Ropak UV F – liquid
10 ml
REF 520 0016 4



Ropak UV P – powder
10 g
REF 520 0016 5





Esthetics beyond compare – pink opaque shows perfection



The viscosity of Ropak UV can be adjusted to the individual requirements.



Mix powder and liquid on a mixing tray to obtain a homogeneous consistency.



Use disposable brush to apply the material. Ropak UV will coat the object even if it exhibits a thin consistency.



Apply thinly using the disposable brush; even dark metal elements will be coated in an aesthetic way.

Ropak Kompaktopaker UV



The ready-to-use alternative for convenient coating of CoCr objects.

Ropak Kompaktopaker UV
20 ml
REF 540 0013 3



Apply Ropak Kompaktopaker with the integrated brush directly onto the clean metal surface.



All metal elements applied with Ropak are perfectly covered.



The use of Ropak provides the future acrylic area with a more pleasant look.

Kompaktopaker tooth-colored UV



To enhance esthe-tics in the area of acrylic teeth.

Kompaktopaker tooth-colored UV
10 ml
REF 540 0010 5



Kompaktopaker tooth-colored is particularly suitable for the anterior area.



The tooth-colored opaque that features a fine coating capacity is applied to the desired area.



This way perfect coating of the metal and thus esthetic restorations are obtained.

Abraso-Gum Acryl **processing set for acrylics**

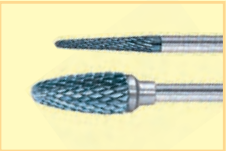
Ready to hand for minor adjustments of dentures. bredent tungsten carbide burs and acrylic polishers are helpful tools for repairs, remove all tender spots, smoothen surfaces and produce high luster.

Assortment

5 pieces
1 Diatit bur D263 KG 60
1 Diatit bur D200 KF 23
1 Abraso-Gum Acryl coarse, green
1 Abraso-Gum Acryl medium, grey
1 Abraso-Gum Acryl fine, red

REF 350 0099 2

Diatit bur



1 piece
REF D200 KF 23

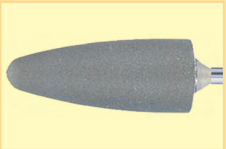
1 piece
REF D263 KG 60

Acrylic polisher coarse, green



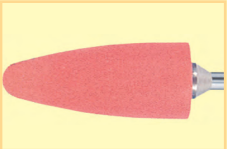
6 pieces
REF P243 HG 10

Acrylic polisher medium, grey



6 pieces
REF P243 HM 10

Acrylic polisher fine, red



6 pieces
REF P243 HF 10



A smooth surface is achieved by exerting slight pressure.



The coarse acrylic polisher removes traces of the bur and shapes the surface.

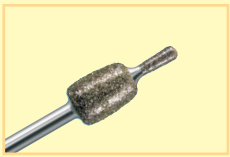


The grey acrylic polisher features a slight abrasive capacity and smoothens the surface in a single working step.



The fine acrylic polisher produces a perfect high-luster on all acrylic materials in next to no time.

Set-up grinding tool



Set-up grinding tool
1 piece
REF 340 0101 0

Two grinding tools in one.
Grinding without exchanging tools in a single working step

- quick adaptation of the underside of the tooth to be set up
- grinding in of occlusal stops

Two grinding tools in one.



occlusal



The small, precisely shaped grinding tip with fine, perfectly cutting diamond grains provides the ideal precondition for well-aimed and rapid grinding in of occlusal contacts.

basal

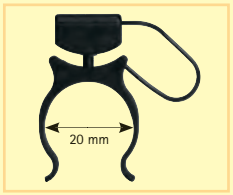


The large grinding area with its optimized shape and selected natural abrasive diamonds ensures maximum removal of material and thus accurate and quick grinding.

Accessories:



Articulation paper holder size 1
1 piece
REF 360 0121 7



Articulation paper holder size 2
1 piece
REF 360 0122 0

Diacryl grinding tool



Time gained and quality increased when processing acrylics with diamond-coated Diacryl grinding tools.
Due to the uniform coarse-grain diamonds with sharp cutting edges and the special shape, Diacryl grinding tools are perfectly suitable for finishing acrylic dentures and tray material in a quick and purposeful manner.



Assortment
1 piece each
REF 340 0107 0



Coarse grinding tool
1 piece
REF 340 0103 0



The special diamond grain size and the hollow shape of the grinding tool result in excellent grinding properties and ensure maximum cooling.



Margin grinding tool, round
1 piece
REF 340 0106 0



Due to tapering in the middle of the grinding tool uniform margins of functional trays can be produced.



Universal grinding tool
1 piece
REF 340 0104 0



Can be universally used for coarse and large papillae as well as for root bases.



Margin grinding tool, pointed
1 piece
REF 340 0102 0



Recesses of labial and buccal frenula can be perfectly finished with this Diacryl grinding tool.



Papilla grinding tool
1 piece
REF 340 0105 0



The fine, pointed flame design allows filigree finishing of alveolar and papillary bases.



Rubber grinding tool
1 piece
REF 340 0090 0



Thanks to the fine grinding performance the object is prepared for polishing within a short time The rubber grinding tool is used instead of sandpaper.

Tungsten carbide tools

Tungsten carbide burs

For processing of acrylics.
Special types with cross cut for smooth surfaces on all acrylics.



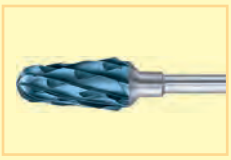
Rapidy Microbur with relief
1 piece
REF H001 NH 10



The microbur with relief ensures quick removal of material even at inaccessible spots.

Diatit burs

With longer service life and increased grinding performance.



1 piece
REF D194 KS 70



The coarse cross cut allows the quick removal of material across large areas.

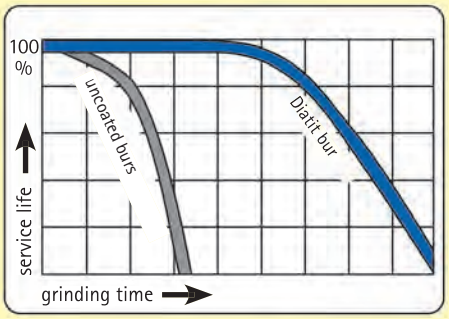
A bredent bur that features Diatit wear protection reaches a degree of hardness of up to 3700 according to Vickers (HV).



1 piece
REF D468 GG 16



Acrylic can be cut precisely and almost without any chips with the Diatit bur.

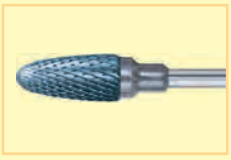




1 piece
REF D237 KG 65



The coarse cross cut produces smooth surfaces in a quick and pressure-free manner.



1 piece
REF D263 KG 60



Due to the universal design of the bur time-consuming exchange of tools is no longer required.

A hardness that is 100 % higher thanks to the Diatit wear protection results in a service life that is three times longer than the one of uncoated bredent burs.

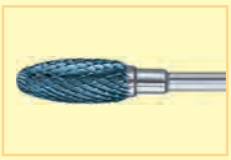


1 piece
REF D194 KG 23



The acute wedge angle of the individual cutting edges ensure precise milling with a high cutting performance.

Further information on burs in chapter 9!



1 piece
REF D274 KG 60



The diagonal cutting edges of this bur allow to produce extremely smooth surfaces in no time.

Acrylic polishing set

The complete range of polishing products for acrylics – systematic polishing.

Further information on polishing brushes in chapter 12.





Abraso Star K50 slightly abrasive
320 g
REF 520 0016 1



The pumice polishing paste diffuses into the brushes and allows particularly long pre-polishing.



The fine abrasive components of the pumice polishing paste simplify careful polishing of the acrylic denture material.

Abraso-Soft Acryl
Ø 80 mm
1 piece
REF 350 0080 0

Abraso-Buff Acryl
Ø 80 mm
1 piece
REF 350 0078 0

High luster buff Acryl
Ø 100 mm
1 piece
REF 350 0082 0

Pumice polishing paste
for polishing of acrylics and metal
3 x 500 g
REF 520 0016 0

Acrylic polishing set **REF 350 0084 0**

1 x 150 g Abraso-Star K50 slightly abrasive
1 x 500 g Pumice polishing rpaste
1 piece Abraso-Soft Acryl
1 piece Abraso-Buff Acryl
1 piece High luster buff Acryl

High luster polishing with the handpiece



Polishing of acrylics with the handpiece.
Brushes and buffs for handpieces provide brilliant high luster on all dental acrylics.



Cotton buff
Ø 22 mm
15 pieces
REF 350 0065 0



Velvet-soft small cotton threads polish palatal patterns excellently so that smooth surfaces are obtained to which coatings can not adhere.



Star brushes goat hair white
Ø 19 mm
15 pieces
REF 520 0015 1



The star design allows to increase the polishing performance up to 50 % and reduces the working time considerably.



Star brushes goat hair white
Ø 13 mm
15 pieces
REF 520 0014 1



All filigree areas are pre-polished with the smaller star brush. Perfectly suitable in the approximal area; protects acrylic teeth.



Cotton buff
Ø 22 mm
15 pieces
REF 350 0091 0



The dimensionally stable linen buff produces a mirror-like finish even on the hardest veneering materials.

Accessories:



Acrypol polishing paste
for veneering materials
170 g
REF 520 0017 0



Leather buff
Ø 22 mm
15 pieces
REF 350 0066 0



Polishing with the leather buff avoids damage to thin transitions towards metal.



Abraso-Starglanz asg
Universal high luster polishing paste
2 x 50 ml
REF 520 0016 3



Polishing buff
felt, three layers
Ø 22 mm
15 pieces
REF 350 0064 0



The three felt layers are perfectly suitable for any type of structure. Extremely fine polishing results are achieved.

Polishing brushes



Abraso-Soft Acryl
Due to the polishing heat the open-pore special fleece and the bleached Chungking bristles absorb more polishing paste and therefore up to 50 % of working time can be saved.

Unlike conventional brushes, the open-pore structure of the fibre fleece allows to take up considerably larger quantities of pumice or polishing paste. Accordingly, less polishing paste needs to be applied.
The fleece is able to absorb more air so that the polishing temperature is reduced and gentle polishing is ensured. Overheating of the surface is avoided.

Abraso-Soft Acryl
Ø 80 mm
1 piece
REF 350 0080 0





The combination of fibre fleece and bleached Chungking bristles let the pumice polishing paste diffuse deeply into the brush.



Mixed pumice diffuses into the brush and the fibre fleece. The polishing agent remains longer on the brush and is gradually applied onto the surface in uniform quantities.

The brush hair are made of bleached Chungking bristles. Bleaching roughens the bristles, makes them softer and increases the absorbing capacity. On the one hand the rough surface holds the pumice paste more easily and on the other hand acrylic is polished more actively without overheating the surface.



Round polishing brushes with plastic core. Round brushes – Chungking white for abrasive polishing.
Due to its small width, the large brush is suitable for polishing areas that are difficult to access.



Chungking white
Ø 80 mm
4 rows
12 pieces
REF 350 0034 0



Chungking white
Ø 70 mm
3 rows
12 pieces
REF 350 0030 0



Chungking white
Ø 65 mm
4 rows
12 pieces
REF 350 0074 0



Chungking white
Ø 60 mm
3 rows
12 pieces
REF 350 0075 0



Chungking white
Ø 50 mm
2 rows
12 pieces
REF 350 0027 0



Narrow brush
White goat hair with metal core for polishing that protects the structure.
The soft goat hair brush avoids the abrasion of the surface structure of acrylic teeth and thus simplifies polishing of approximal areas.

Narrow brush – white goat hair with metal core
Ø 48 mm
10 pieces
REF 350 0061 0

Polishing buff



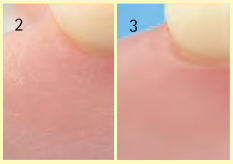
Abraso-Buff Acryl
Three rows of high-quality Chungking bristles and special fabric liners guarantee prepolishing with an excellent result.

Abraso-Buff Acryl
Ø 80 mm
1 piece
REF 350 0078 0





The small width of the Abraso-Buff Acryl allows polishing in filigree approximal areas. Exchanging the brush is no longer required.



After finishing, the optimum prehigh-luster is easily achieved in no time.

The 2 x 2 special textile layers of the Abraso-Buff acrylic retain polishing pastes or pumice considerably longer than conventional brushes. They gradually spread abrasive materials and thus simplify polishing.



Prepolishing buff Acryl
Aggressive polishing behaviour – working time reduced.

The stable layers of the prepolishing buff Acryl consist of silicone-treated linen. Accordingly, particularly aggressive polishing is possible.

Prepolishing buff Acryl
Ø 80 mm
24 layers
1 piece
REF 350 0099 1

Ø 60 mm, 24 layers
1 piece
REF 350 0098 0



The buff allows time-saving polishing at reduced temperatures.



Due to the different sizes palatal areas can also be polished easily.

Polishing buff



High luster buff Acryl
No formation of fuzz and only reduced evolution of heat.

High luster buff Acryl
1 piece each,

Ø 60 mm, 40 layers	**REF 350 0094 0**
Ø 100 mm, 35 layers	**REF 350 0082 0**





The outer layers with reinforced fibres provide the buff with a stability never achieved before.



The 35 resp. 40 layers of linen have been welded with an ultrasonic unit to protect them against twisting and produce a unique high luster due to the high stability.



The particularly loosely woven linen ensures circulation of air during high luster polishing so that overheating of the acrylic is avoided. This results in a very gentle polishing process.

Special linen consequently avoids excessive evolution of heat on the acrylic surface.



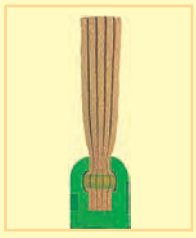
Leather buff
Produces high luster in a quick and gentle manner.

Leather buff for acrylics
1 piece each

Ø 80 mm, 5 layers	**REF 350 0036 0**
Ø 100 mm, 5 layers	**REF 350 0035 0**

Leather buff for metal
1 piece each

Ø 60 mm, 9 layers	**REF 350 0099 0**





Acylics can be polished at lower temperatures in a very gentle manner using the leather buff for speeds up to 1500 rpm.



Polishing at lower temperatures produces a high luster even in the approximal area so that coatings will not remain there.

The leather buff produces perfect high luster without any retentions for bacteria. This way cleaning of dentures is simplified.

The strong rise in allergies and intolerances to dental alloys, amalgams, residual monomers, and the resulting allergic reactions have led to a rethink in the choice of dental materials for restorative dentistry.

The use of highly-compatible thermoplastic resins enables the manufacture of high-quality, metal-free and biocompatible dentures. An appropriate thermoplastic is available for every area of application of dental technology.

Using the *for* 2 press vacuum press system, the high-performance polymer BioHPP is produced for the manufacture of highly-stable framework structures for permanent fixed and removable dentures. The elasticity of this high-performance polymer has been specially adapted to human bones.

There are five different thermoplastics available in a variety of colours for the thermopress 400 injection moulding system. Thanks to these different types of plastic, there are many areas of use.



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BREDENT GROUP ACADEMY INTERNATIONAL



Flexibility is the concept that sets the bredent group academy apart from other training providers on an international level! The modular structure of the individual courses is based on indications - whether related to dental technology or dental medicine. This offers you an ideal combination of logically coordinated and interlinked modules relating to fixed prostheses, removable prostheses, combined prostheses, prostheses on implants or natural teeth, and also the issue of prevention.

All modules can be booked separately and highlight the individual advanced modules as well as transverse solutions for each module. This diverse and self-contained concept is an option for anyone interested in further and personal development.

This flexibility allows each bredent partner to respond to the wishes and knowledge of their clients and further develop these according to their level of knowledge. What is more, the concept is highly targeted and seeks to achieve the greatest impact possible by integrating the full range of bredent and bredent medical products, systems and treatment concepts. Within the individual modules, the aim of the course, the course description and the materials list can be viewed in detail by potential participants in the form of text and images.

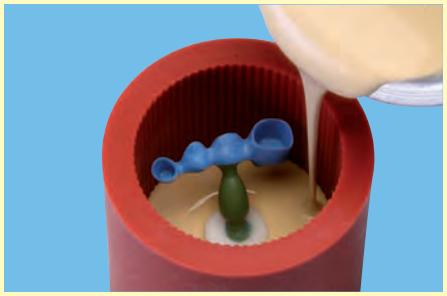
The benefit lies in the fast and easy navigation through the concept. The bredent medical partners will quickly identify the indication-related path and bredent partners will identify a product and system-related route.

Courses provided on site are delivered by qualified and trained bredent group partners. Those partners will be familiar with all products, systems and treatment concepts within the bredent group academy, and will be regularly trained and kept up to date.

Realise your own unique potential with the bredent group academy!



A wax model is created using a plaster or plastic master model under typical laboratory conditions. The dentist should carry out a tangential or chamfer preparation, just as with ceramic crowns or bridges. Fully anatomical occlusion surfaces are possible because of the white colour of the BioHPP. The framework structures can be veneered with traditional composite veneers.



Once the specific wax weight of the wax model has been determined, and the minimum amount of BioHPP necessary for the pressing procedure has been established, the wax model is invested in a special silicone mould. After a setting time of 20 minutes, the mould can be placed directly together with the disposable press plunger in the pre-heating oven.



The investment material mould can be heated conventionally or using high-speed heating. The BioHPP is also melted in the pre-heating oven at 400°C within 20 minutes. After that, the mould is used with the attached disposable press plunger in the *for 2 press vacuum press device*. By manually raising the pressing table, the pressing procedure is triggered and automatically completes within 38 minutes. After that, the mould is cooled at room temperature and devested.



The BioHPP can very easily be processed with little contact pressure using cross-toothed carbide mills. The speed of rotation may not exceed 8,000 rpm. Additional mechanical retention for a necessary adhesion can be applied in the form of retention beads or splitters. However, this is not a stringent requirement.



The use of the bonding agent visio.link is crucial for a high level of adhesion. This must also be used for composite veneers foreign to the system. After applications, visio.link is polymerised in a light-hardening device (e.g. bre.lux) for 90 seconds. Veneering then follows afterwards.



The BioHPP can be very well polished by using the right rotating instruments.

1st step: Carbide mill (cross-tooth)
2nd step: Diagen-Turbo-Grinder
3. Ceragum rubber-polishing cylinder
4. Goat-hair brush with pumice stone powder (0-90µm particle size)
5. Goat-hair brush with high-gloss polishing paste (Abraso-Starglanz)

In the for 2 press vacuum press system, metal-free and biocompatible dentures are manufactured to the highest standard. The range of indications stretches to include fixed and removable dentures with all kinds of friction elements. The material to be processed is a high-performance polymer "BioHPP", which has been specially developed as a framework material for the field of dentistry. BioHPP can be veneered with all composite veneers through the use of a special bonding agent, visio.link. The purchase prices for the whole systems are very low, meaning the investment will pay for itself, even if only a small number of jobs are carried out.

The materials used

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fixed dentures	page 355
removable dentures	page 356
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for 2 press vacuum press device



***for* 2 press vacuum press device for the manufacture of metal-free and biocompatible dentures.**
Using the *for*2 press vacuum press device, the thermoplastic high-performance polymer BioHPP is processed into a mould made of phosphate-bonded investment material. The end result is a metal-free, white framework structure, which bonds extremely well with traditional composite veneers individually and in a highly-aesthetic manner. Dentures manufactured from BioHPP are certified for permanent use.
The melting procedure for the BioHPP high-performance polymer is carried out in your pre-heating oven that is already available. The subsequent pressing procedure is completed fully automatically in a vacuum.

***for* 2 press device**
1 unit
REF 140 0060 0

***for* 2 press Basic Set**
1 x *for* 2 press mould (consisting of mould plates)
3/16 mm and silicone ring, 35 x 210 g
Brevest *for* 2 press EBM incl.
2 litres Bresol *for* 2 press Liquid,
25 x *for* 2 press filler 16 mm (disposable press plunger for pressing the materials into the mould)
20 g BioHPP, 1x processing instructions
REF 140 0060 1



Once the investment material mould has been pre-heated in the pre-heating oven, and the wax or plastic of the model has melted away, the BioHPP is also melted at 400°C in the pre-heating oven. Immediately after that, the mould is placed in the *for* 2 press vacuum press device with the melted BioHPP and the mounted disposable press plunger. By raising the lift, the automatic pressing procedure is triggered in a vacuum atmosphere.



After the 3-minute pressing procedure including vacuum admission, the cooling process begins while maintaining the pressing pressure. This is the only way to guarantee that the material properties of Bio HPP are fully exploited.



After a total of 35 minutes, the entire pressing procedure is ended and is signalled to the user by means of an acoustic signal and an optical LED display. The Bio HPP framework structure can then be immediately devested and processed further.



Example of application on the basis of a bridge with five splinted individual crowns from BioHPP veneered with viso.lign veneers.

Image: Zahntechnischer Meisterbetrieb Harald Schwindt.

Technical data *for* 2 press	
Power supply	90 - 250 Volt, 50 - 60 Hz
Power consumption	15 Watt
Venturi nozzle vacuum performance	approx. 760 mbar
Weight	13 kg
Dimensions (W x H x D)	250 x 600 x 290 mm
Protection class	IP 34
Noise level	< 70 dB
Input air pressure	min. 4.5 to max. 6 bar
Fuse	T 2.5 A

for 2 press - The system components



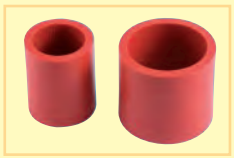
The material BioHPP
Bio HPP is sealed against humidity and comes in a transparent tube. The required quantity can be dosed by the gram, looked up from the wax to Bio HPP conversion chart. Only that amount of material is used.
BioHPP

20 g	**REF 540F2PB2**
100 g	**REF 540F2PB3**
10 x 15 g Pellet for mould XXL	**REF 540F2PB4**



Mould system *for* 2 press mold
Consisting of sprueing base and silicone ring.
Available in 3 different : 3, 9 and 9 XXL.
Sprueing base and silicone ring

Size 3	**REF 360F2P16**
Size 9	**REF 360F2P20**
Size 9 XXL	**REF 360F2P30**



Silicone rings
Silicone ring suitable for the *for* 2 press mould. Easy and quick demolding of set investment. Checkered inside, enlarged surface for effective evaporation during pre-heat process.
Silicone ring
Size 3, **REF 360F2PR3**
Size 9, **REF 360F2PR9***
* Also suitable for the 9 XXL mould plate



Sprueing base single

Size 3	**REF 360F2PT1**
Size 9	**REF 360F2PT2**
Size 9 XXL	**REF 360F2PT3***

* Only for processing the BioHPP pellet



Disposable plunger *for* 2 press filler
for safe pressing results
Disposable plungers for pressing the high performance polymer into the mould.
Rounded at one end for smooth forward movement. Syncronized cooling process between plunger and investment material, no risk of chipping or cracks of polymer. Pressure resistant.
Disposable plunger

25 pieces 16 mm	**REF 570F2P16**
25 pieces 20 mm	**REF 570F2P20**
14 pieces 30 mm conical	**REF 570F2P20***

* Only for processing the BioHPP pellet



Investment brevest *for* 2 press
Micro grain special investment for the *for* 2 press System.
Appropriate for speed or conventional burn out processes.
Brevest *for* 2 Press
Box of (approx. 7,35 kg) 35 x 210 g bags
incl. 1000 ml Bresol *for* 2 press
REF 570F2PV1

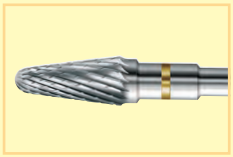


Bresol *for* 2 press
Investment liquid Brevest *for* 2 press
1000 ml
REF 520F2PL1

Accessories:



„Generation M" relief burs
REF H274 M5 16



„Generation M" relief burs
REF H263 M5 40



Diagen-Turbo-Grinder
REF 340 0020 0



Ceragum
Rubber polishing cylinder
REF PWKG0600



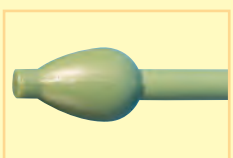
Goat-hair brush
REF 350 0061 0



Abraso-Starglanz
REF 520 0016 3



Acrypol
REF 520 0017 0



Wax casting bulbs
REF 430 0144 7

for 2 press and BioHPP

Advantages and benefits of BioHPP

Reproducible manufacturing process

Advantage: **Consistent quality thanks to automatic and electronically-monitored pressing procedure**

Benefit: **Consistent material properties and avoidance of complaints**

Shock-absorbing effect (peak-off)

Advantage: **Protection of the implant against high masticatory forces**

Benefit: **Durability and increased comfort for the patient**

Abrasion-resistant tooth-like material

Advantage: **Occlusal surfaces keep their shape over long periods of use**

Benefit: **Increases quality of life**

White framework material that can be veneered

Advantage: **Can be veneered individually with composite veneers**

Benefit: **Enables individual adjustment to the remaining teeth and prevents chipping**

Low density (1.3 to 1.5 g/cm³)

Advantage: **Very simple dentures**

Benefit: **Increases comfort for patients**

Steady friction in connecting elements

Advantage: **Prevents loss of friction**

Benefit: **Increases comfort and saves on replacing the dentures**

Homogeneity

Advantage: **Uniformly distributed fillers in the semi-crystalline polymer matrix**

Benefit: **Manufacture of permanent dentures (MPG Cl. IIa)**

Biocompatibility

Advantage: **No harmful substances such as metals or residual monomers are released**

Benefit: **Offers body-friendly and healthy dentures**

Material properties particular to BioHPP

Mechanical properties according to ...
DIN EN ISO 10477

E-modulus	–	4,000 MPa
Flexural strength (no material failure)	–	>150 MPa
Water absorption	–	6.5 µg/mm³
Water solubility	–	< 0.3 µg/mm³

Thermocycling 10,000 cycles 5°C / 55°C
in accordance with DIN EN ISO 10477

E-modulus	–	4,000 MPa
Flexural strength	–	>150 MPa (no material failure)

Breaking load tests on 3-part bridges

Maximum load without failure (after 24 hr immersion in water, 37 °C)	–	>1,200 N
Maximum load without failure (after mechanical and thermal alternating load 1.2 million x 50 N, 10,000 x 5 °C / 55 °C)	–	>1,200 N

Other properties

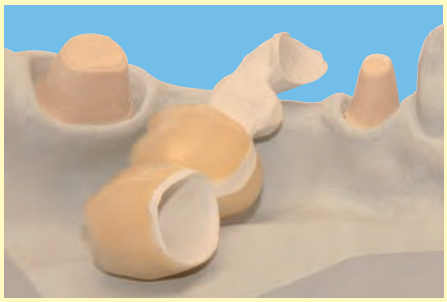
Melting range (DSC)	– approx. 340 °C	**Density**	– 1.3 to 1.5 cm³
Bond strength	> 25 MPa	**Hardness (HV)**	– 110 HV 5/20



3-part anterior bridge with a very high-quality aesthetic veneer.

Indications of BioHPP - fixed dentures

Posterior area



To enable the manufacture of an aesthetically-pleasing and durable prosthetic with BioHPP, the bond between BioHPP and the composite veneer is of the utmost importance.



The visio.link adhesive from the visio.lign veneer system incorporates all outstanding adhesive properties to materials such as PMMA and composites. In this way, visio.link is a primer and bonder in one.

Anterior area



The aesthetic zone in the anterior area offers the best possible range of indications for this biocompatible and metal-free framework material.



As far as aesthetics are concerned, this bridge is comparable to a zirconium oxide bridge.



The use of BioHPP dentures means that a flexible material adapted to bone is used in the mandible.

Molars



Thanks to its colouring, BioHPP can be used as a fully-anatomical restoration in the molar area and offers an ideal environment thanks to the abrasion resistance particular to the material.



The BioHPP bridge is securely fitted to the uni. fit adhesive sleeves using DTK adhesive.

Red-white aesthetic



Using visio.link adhesive, it is possible to manufacture gum fillings.

Photos: Dental-Labor Schwindt, Landau/Pfalz

Indications of BioHPP - removable dentures

Bridgework



The BioHPP offers outstanding friction properties in combination with metallic and ceramic primary structures. As far as the patient is concerned, the high comfort and ease of insertion and removal stand to the fore. The inert properties preclude any adverse effects.

Telescopic bridges/crowns

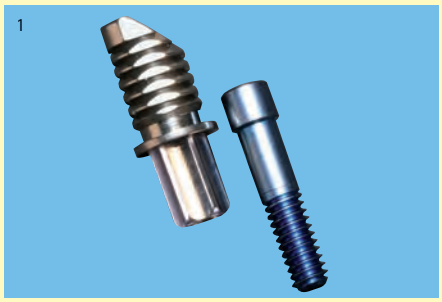


There is no loss of friction thanks to the flexibility of the material and the ease with which the secondary structure can be veneered. No abrasion to the primary part.

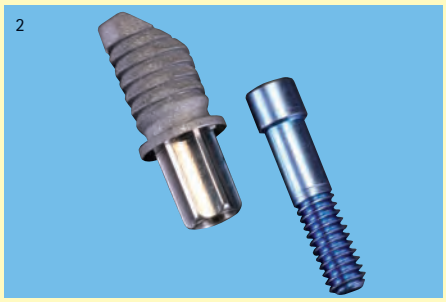
Photo: Dentallabor Fiedler, Neulußheim

Indications of BioHPP - implantology

Individual abutments



The individual abutment "SKYuni.HPP" has been developed for bredent medical's SKY and blueSKY implants. In the future, additional abutments will also become available for other companies' implant systems



The SKYuni.HPP is blasted with aluminium dioxide with a grain of 110µm and max. 3 bar pressure before wax modelling.



Final wax modelling on the SKYuni.HPP



The wax model is sprued with the SKYuni.HPP on the base mould of the *for* 2 press system. A casting bulb is used for this.



The individual abutment is over-pressed with BioHPP.



The final abutment can now be veneered or fitted with a ceramic crown directly or finished with a BioHPP crown and a visio.lign veneer.



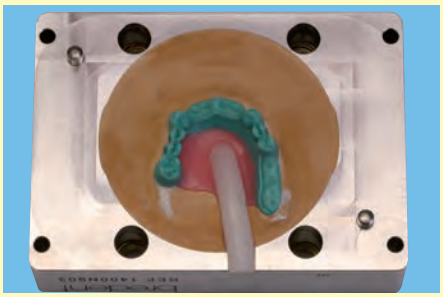
The master model prepared for the silicone duplication is secured in the middle of the duplicating flask. The mixed duplicating silicone Exaktosil N21 is then poured into the flask without any bubbles. The edges of the lining wax should be cut off in undercuts like in a watch seam. This provides an outstanding mechanical bond for the resin saddle material.



The silicon duplicate can be cast immediately after the hardening period using the expansion plaster Expando-Rock. Here, it is important to pay attention to the necessary mixing ratio of the expansion plaster Expando Rock for the thermoplastic resin to be used. These mixing ratios can be found in the user manual. In the thermoplastic bre.crystal HP, a class 4 plaster, Exakto-Rock S, is used instead of the Expando-Rock.



The wax modelling should be done using modelling waxes with low melting temperatures. The edges of the resin saddles should be moulded for mechanical retention and an undercut end strip in the form of a watch seam.



The duplicate model is invested into the lower half of the flask with a type 3 dental stone. In order to easily separate both halves of the flask for the wax boil out without any damage, the undercut area should be blocked off with plaster. During the injection process, the fused plastic is guided into the wax model via a 10 mm injection sprue and then a 1.5 mm thick film sprue.



All thermoplastic materials can be processed very easily using cross-toothed carbide mulls, such as mills for silicone, for example. The surface is then smoothed using sandpaper cloth and pre-polished on the polishing lathe with pumice stone. Finally, the surface is polished to a high gloss with a cloth buffing wheel using a little high-gloss polishing paste.



After finishing, the thermoplastic framework structure, here in the form of a telescopic bridge, can be finished with gum-coloured resins. Biocompatible and residual monomer-reduced bre.crystal HP can likewise be used by means of a second investing and injection.

Various thermoplastic materials can be processed using the thermopress 400 injection moulding system. The advanced injection moulding device has been adjusted to the ever-higher material-specific requirements. Practical implementation in the manufacture of metal-free dentures can be achieved quickly for the dental technician.

The materials used

thermopress 400	page 358
bre.crystal HP	page 360
bre.dentan HP	page 360
Bio Dentaplast	page 361
bre.flex	page 362
bre.flex / bre.flex 2nd Edition	page 362

thermopress 400



Injection moulding device for processing thermoplastic resins with a melting temperature up to 400°C

- No additional equipment such as CO_2bottles or a compressed air supply are required. This saves on additional costs and time. Consistent quality due to avoidance of a drop in pressure.
- High operational comfort when handling the device.
- Time-saving function thanks to simultaneous operation of both heating chambers.
- The injection process can only be performed with the lid closed, providing additional safety.

Convenient removal of the flask thanks to automatic cartridge ejection if the bracket is unlocked.

thermopress 400
1 unit with power cord
2 allen keys
1 cleaning brush
1 special tool
REF 110 0040 0


1

The melting process is specially adapted to the demands of plastic thanks to high-performance heating elements. In this way the best possible material properties are achieved.


2

The forces of up to 2 kN exerted on the special flask are accommodated in the device by means of a special input and fastening system.
In this way, it is ensured that the fused thermoplastic resin is free of air pockets and is injected into the hollow part of the flask in the correct shape.


3

All 6 different processing parameters are stored in the device software. In total, up to 30 melting programmes can be used in the device in a user-friendly manner.

Technical data thermopress 400

Width	650 mm
Height	250 mm
Depth	300 mm
Weight	40 kg
Voltage	220 - 230 V
Power	0.5 - 1.6 kW
	max. 2.2 kW

Accessories thermopress 400:

1 press-out device and punch*	**REF 140 0090 4**
1 pair of cartridge pliers*	**REF 140 0090 6**
1 flask hook with hex*	**REF 140 0091 2**
1 flask N small* (l 122 mm, w 102 mm, h 72 mm)	**REF 140 0N90 3**
1 flask N large (l 140 mm, w 102 mm, h 72 mm)	**REF 140 0N90 5**
1 cleaning brush	**REF 110 0040 2**
1 thermopaste 400 special paste, 50 g*	**REF 540 0105 1**
Expando-Rock-Set	
5 kg expansion plaster, 500 ml Expandosol	**REF 570 0ERS 5**

thermopress 400 accessories assortment (Unit)
7 pieces
REF 110 0040 1
View above, accessories thermopress 400: articles marked with * are included in thermopress 400 accessories assortment!

thermopress introductory assortment (20 cartridges)

5 x 30 g	bre.crystal HP pink 1	2 x 20 g	bre.flex pink
3 x 24 g	bre.crystal HP clear	2 x 16 g	bre.dentan HP A
5 x 24 g	bre.flex 2nd Edition pink veined	3 x 16 g	Bio Dentaplast A2

REF 140 0090 2

Brochure Patient Information thermopress sensitive
REF 000 415G B

thermopress 400 Patienten passport
REF 000 628G B

thermopress 400 Information Brochure
REF 992 945G B

thermopress 400 Patient Information
REF 000 135G B

Training program
2-day courses (Senden)
REF 950 0020 0

thermopress 400 assortment S1 (20 cartridges)

2 x 30 g	bre.crystal HP pink 1	1 x 20 g	Bio-Dentaplast A3
2 x 24 g	bre.crystal HP pink	1 x 20 g	Bio-Dentaplast A3
5 x 24 g	bre.flex 2nd Edition pink veined	1 x 250 ml	Acryl Sep
		1 x 20 ml	Die varnish, light-curing opaque
1 x 24 g	bre.crystal HP clear		
5 x 16 g	bre.dentan HP A	1 x 50 g	thermopaste 400

REF 540 S000 1

thermopress 400 assortment S2 (20 cartridges)

5 x 16 g	Bio Dentaplast A2	5 x 16 g	Bio Dentaplast B3
5 x 16 g	Bio Dentaplast A3	1 x 250 ml	Acrylic Sep acrylic separating liquid
5 x 16 g	Bio Dentaplast B2		

REF 540 S000 2

thermopress 400

Thanks to the large choice of thermoplastic resins, the thermopress 400 device can be used for almost all areas of application.



bre.crystal HP

features long-term stability, provides a dense and hence smooth surface.
This results in enhanced comfort of wearing of full dentures.

- Almost no residual monomer – high biocompatibility
- limited water absorption – constant suction effect, lasting precision of fit
- available in the shades: crystal clear, pink 1, pink 2, pink 3, pink stippledh
- Melting temperature 280° C



bre.dentan HP

is an industrially polymerised thermoplastic; this increases the fracture resistance and biocompatibility in temporary crowns and bridges.

- can be veneered with conventional C+B resins
- available in the three common dentine shades A, B, C
- Melting temperature 280° C



bre.flex

Prosthetic base material for partial dentures.
The indication range also includes splints and sports mouthguards.

- available in the shades: translucent, pink 1, pink 2, pink 3 and tooth shade B
- Melting temperature 222° C

bre.flex 2nd Edition

- In the colours transparent, pink 2 and pink veined
- Melting temperature 280° C



Bio Dentaplast

Clasps and attachments which are normally made of metal can be produced using tooth-colored Bio Dentaplast. The esthetic appearance of teeth at which retaining clasps have been attached is improved.
Additional indications are

- crowns and bridges (temporary)
- telescopic and attachment work
- tooth-colored clasps
- shades A1, A2, A3, B2, B3 based on the VITA shade guide
- to be processed at 220° C

bre.crystal HP



bre.crystal HP
(Thermoplastic resins – partial and full dentures)

color	Quantity	REF
crystal-clear	20 x 24 g	**540 0P32 4**
crystal-clear	20 x 30 g	**540 0P33 0**
crystal-clear	1 x 500 g	**540 0P30 5**
pink 1	20 x 24 g	**540 0P12 4**
pink 1	20 x 30 g	**540 0P13 0**
pink 1	1 x 500 g	**540 0P10 5**
pink veined	20 x 24 g	**540 0P02 4**
pink veined	20 x 30 g	**540 0P03 0**
pink veined	1 x 500 g	**540 0P00 5**
pink 2	20 x 24 g	**540 0P22 4**
pink 2	20 x 30 g	**540 0P23 0**
pink 2	1 x 500 g	**540 0P20 5**
pink 3	20 x 24 g	**540 0P42 4**
pink 3	20 x 30 g	**540 0P43 0**
pink 3	1 x 500 g	**540 0P40 5**

Esthetically appealing thermoplastic resin.

	bre.crystal HP	Heat-/cold-curing resin
Shrinkage	0.6 %	5-7 %
Water absorption	0.35 %	2 %
Residual monomer	0.2 %	2-7 %

Wax model



The flexible plastic casting channel wax with the required diameter of 10 mm is fed via a 1.5 mm thick wax plate (film sprue) into the wax model.



Dentasil tooth protection silicone (REF 520 0029 6) allows to achieve a high final hardness (Shore 65) so that the teeth are perfectly protected against the high press-in pressure.

Investing



The wax model is invested into the flask using class III stone and then boiled out.

Retentions



The roughened acrylic teeth with retentions are wetted with the Haftconnector (bonding agent) for 5 min. The circular retention produced using Vb2 ensures safe hold.

Polishing

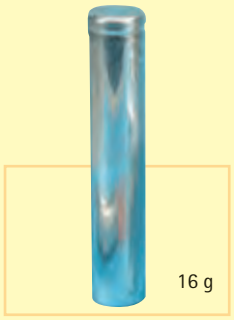


The highly compressed bre.crystal HP denture can be processed and polished just like conventional acrylics.

bre.dentan HP



Thermoplastic resin featuring high resistance to fracture for tooth-colored crowns, bridges and long-term temporary restorations – simple, fast and favorably-priced.



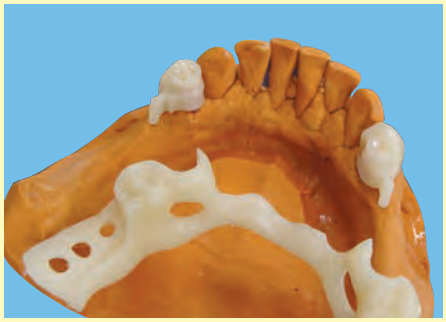
	Quantity	REF
bre.dentan HP A	20 x 16 g	**540 0DA1 6**
bre.dentan HP B	20 x 16 g	**540 0DB1 6**
bre.dentan HP C	20 x 16 g	**540 0DC1 6**

bre.dentan HP in 3 tooth shades
(crowns and bridges)



Outstanding material properties for accurate positioning and perfect fit. Ideal to prepare exact, high-quality temporary restorations.

Bio Dentaplast



.... offers a wide range of applications in the area of attachment and chrome cobalt work.
Reinforced pre-bent clasp pattern for resin injection moulding. No application of additional wax required, hence time is saved and correct cross-section design is ensured.

Expando-Rock-Set
5 kg expansion plaster
500 ml Expandosol
REF 570 0ERS 5



Premolar clasps, bent for resin injection moulding
10 sheets with 10 clasps each left + right
REF 430 0748 5

Bio Dentaplast
(tooth shade based on the Vita shade guide)

	Quantity	REF
A1	20 x 16 g	**540 BA11 6**
A1	20 x 20 g	**540 BA12 0**
A2	20 x 16 g	**540 BA21 6**
A2	20 x 20 g	**540 BA22 0**
A2	1 x 500 g	**540 BA20 5**
A3	20 x 16 g	**540 BA31 6**
A3	20 x 20 g	**540 BA32 0**
A3	1 x 500 g	**540 BA30 5**
B2	20 x 16 g	**540 BB21 6**
B2	20 x 20 g	**540 BB22 0**
B2	1 x 500 g	**540 BB20 5**
B3	20 x 16 g	**540 BB31 6**
B3	20 x 20 g	**540 BB32 0**
B3	1 x 500 g	**540 BB30 5**

Preparatory work (for a telescopic prosthesis, for example)



The alveolar ridges for the resin saddle are covered with preparation wax (REF 430 584 0). The finished edges should be cut off like a watch seam so that the saddle resin can be seated mechanically. The model is then cast using Exaktosil N21.

Duplicate



So that the cast primary parts are not damaged by the high injection forces, metal reinforcements should be placed in the primary parts straight after pouring in the Expando-Rock.

Model



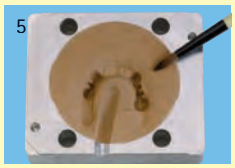
The wax modelling should be carried out using softer modelling waxes with low melting temperatures. Points and sharp edges must be avoided without fail. Due to the extremely simple processing of the thermoplastic resin, the wax model can turn out stronger.

Investing



In order to obtain the best reproducible material properties, a film sprueing should be carried out. This will ensure that the liquid resin is guided into the framework geometry in the shortest and quickest way.

Separating



Both halves of the flask must be separated from each other using a special separating liquid, Acrylic Sep (REF 520 0029 1). It is important to ensure that both halves of the flask are first screwed together shortly before the injection process and placed in the thermopress plastic injection moulding machine. Otherwise there is the risk of blistering in the moulded objects.

Finishing



All thermoplastic materials can be processed very easily using cross-toothed carbide mulls, such as mills for silicone, for example. The surface is then smoothed using sandpaper cloth and pre-polished on the polishing lathe with pumice stone. Finally, the surface is polished to a high gloss with a cloth buffing wheel using a little high-gloss polishing paste.

Finishing



After finishing, the thermoplastic framework structure, here in the form of a telescopic bridge, can be finished with gum-coloured resins. Biocompatible and residual monomer-reduced bre.crystal HP can likewise be used by means of a second investing and injection.

bre.flex and bre.flex 2nd Edition



bre.flex is a flexible, highly compatible polyamide and has proved its suitability for dentures for allergic persons.
Silicone burs are perfectly suitable for processing bre.flex.

bre.flex and bre.flex 2nd Edition
(Telescopic prostheses, splints and sports mouth-guards, chrome cobalt and attachment work)

bre.flex color	Quantity	REF
translucent	20 x 24 g	**540 0F12 4**
translucent	20 x 20 g	**540 0F12 0**
translucent	20 x 16 g	**540 0F11 6**
translucent	1 x 500 g	**540 0F10 5**
tooth shade B	20 x 24 g	**540 0F22 4**
tooth shade B	20 x 20 g	**540 0F22 0**
tooth shade B	20 x 16 g	**540 0F21 6**
tooth shade B	1 x 500 g	**540 0F20 5**
pink 1	20 x 24 g	**540 0F02 4**
pink 1	20 x 20 g	**540 0F02 0**
pink 1	20 x 16 g	**540 0F01 6**
pink 1	1 x 500 g	**540 0F00 5**
pink 2	20 x 24 g	**540 0F42 4**
pink 2	20 x 20 g	**540 0F42 0**
pink 2	20 x 16 g	**540 0F41 6**
pink 2	1 x 500 g	**540 0F40 5**
pink 3	20 x 24 g	**540 0F32 4**
pink 3	20 x 20 g	**540 0F32 0**
pink 3	20 x 16 g	**540 0F31 6**
pink 3	1 x 500 g	**540 0F30 5**

bre.flex 2nd Edition Colour	Quantity	REF
pink 2	1 x 500 g	**540 0F50 5**
pink 2	20 x 16 g	**540 0F51 6**
pink 2	20 x 24 g	**540 0F52 4**
pink veined	1 x 500 g	**540 0F60 5**
pink veined	20 x 16 g	**540 0F61 6**
pink veined	20 x 24 g	**540 0F62 4**
clear	1 x 500 g	**540 0F80 5**
clear	20 x 16 g	**540 0F81 6**
clear	20 x 24 g	**540 0F82 4**

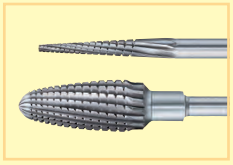
Accessories:



Aluminium Catridges empty
18 pieces
REF 540 KL01 8



Diatit-Multidrill
1.5 Ø x 8 mm
REF 330 0073 0



Silicone burs
REF S187 QG 23
REF S263 QG 60



Diamond point Veneering technique Vb 2
1 piece
REF 340 0083 0



Plaster insulating agent
750 ml
REF 540 0013 5



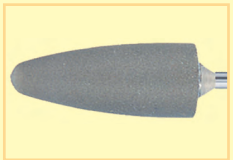
Austragegerät
REF 320 0044 0



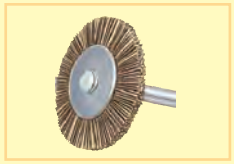
Exaktosil N 21
Componente A
1000 ml
Componente B
1000 ml
REF 540 0114 7



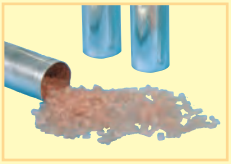
Abraso-Gum Acryl
6 pieces
REF P243 HG 10



Abraso-Gum Acryl
6 pieces
REF P243 HM 10



Rodeo round brushes
15 pieces, Ø 21 mm
REF 350 0097 0



Catridges empty
18 pieces
REF 540 KL01 8



Qu-resin pink
50 ml cartridge
REF 540 0116 5



Acrylic Sep Acrylic/plaster separating liquid
250 ml
REF 520 0029 1
750 ml
REF 520 0029 4



Dentasil tooth protection silicone
2 x 50 ml
with 24 mixing cannulas size 2, yellow
REF 520 0029 6

Mixing cannulas
size 2, yellow
12 pieces
REF 320 0045 1



Flexible acrylic sprue wax
275 g, Ø 10 mm
REF 430 0741 0

Bonding agent
REF 520 0029 2

Snoring has become the number 1 endemic illness. Extreme snoring disrupts restorative sleeping in 50 % of all bedrooms – it can reach a volume of 90 decibels, which is the same as the noise produced by a lorry driving by.

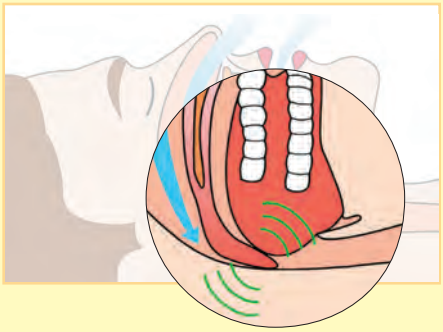
Two forms of treatment are available. The protrusion splint, which is worn in the case of slight or medium obstructive sleep apnoea syndrome, and biofunctional treatment with a vacuum activator, are used in the case of primary snoring without obstruction.



Snoring therapy / *Sleep*Plus mandibular advancement device
Snoring therapy 364
*Sleep*Plus mandibular advancement device 364

Snoring therapy / Biofunctional therapy
Biofunctional therapy 366
Vacuum activator *silencos* 366
Vacuum activator *silencos kids* 367
Silencos night device 367

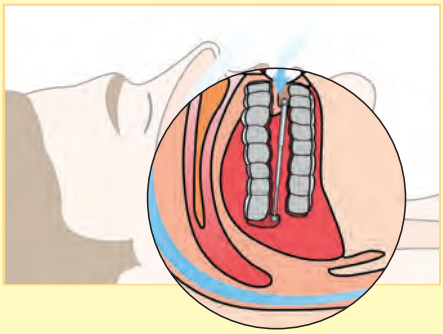
Snoring therapy



Snoring – a common disease
Extreme snoring (up to 90 decibel) disrupts restorative sleeping in 50 % of all bedrooms!
With increasing age, more than half of the population suffers from snoring problems:

- 40 – 60 % experience simple snoring without disrupted breathing (primary snoring)
- 5 – 10 % suffer from pathologic snoring with health risks caused by blockage of the airway (obstructive sleep apnea)

But snoring does not simply generate annoying sounds or sleep disruption – it may cause serious diseases, such as high blood pressure, stroke or heart attacks.



The efficiency of intraoral mandibular advancement devices to combat minor or medium sleep apnea syndromes is already established through several studies. Their use is recommended by the Deutsche Gesellschaft Zahnärztliche Schlafmedizin - DGZS (German Society of Dental Sleep Medicine) for this area of indication. Specific dental, oral and functional diagnostics are required prior to use.

The individually designed intraoral mandibular ad-vancement device *Sleep*Plus keeps the lower jaw toward the median line at night, and thus prevents from snoring and reduces a disrupted breathing significantly.

*Sleep*Plus mandibular advancement device



A system for the treatment of minor or medium obstructive sleep apnea syndrome (OSAS).



Telescopic appliance, mandible immobilization, and a frontal and lateral bite elevation create a matching treatment device

Mandibular Advancement Device

The mandibular advancement device *Sleep*Plus is a novel and comfortable treatment device with an especially high wearing comfort to combat obstructive snoring efficiently.
This advanced development of the already known mandibular advancement device offers a very good lateral and vertical mobility, due to telescopic ball and socket joints. Since the telescopic rails of the mandibular advancement device *Sleep*Plus are occlusally integrated, the buccal mucosa will not become irritated.
A temporomandibular joint support, which is modeled into the synthetic material, provides an additional relief of the musculature during sleep.
The design of the mandibular advancement device *Sleep*Plus was developed in the dental practice under clinical conditions and warrants high patient acceptance. The treatment concept has proven itself for several years.
The mandible advancement device *Sleep*Plus allows you to expand your range of products and to supply your patients with an established and proven treatment device that was developed in the dental practice.
The unique comfort of *Sleep*Plus is going to make your laboratory even more successful! Offer your dentists a product that makes for satisfied patients.

We are going to support you with:

- Workshops for practical production (certification)
- Advanced training courses about snoring therapy (certification)
- Marketing support through
  - Patient flyers
  - Waiting room posters
  - Patient information on the internet, including reference to certified den tists and dental laboratories, www.sleepplus.de

*Sleep*Plus mandibular advancement device



SleepPlus

Mandibular Advancement Device

Ball and socket joints on telescopic rails provide high lateral and vertical mobility.

The system components and their advantages:

- The telescopic rails are delivered with individu ally adjustable springs, which are variable to suit any bite situation.
- Ball and socket joints allow for high three-di- mensional mobility.
- Occlusally incorporated telescopes offer optimal wearing comfort. The buccal mucosa will not become irritated!
- The bite elevation relieves the temporomandibu lar joints at night.
- The optional frontal immobilization keeps the mandible in a comfortable position.



Visit our workshop and get acquainted with the professional production of the intraoral man- dibular advancement device *Sleep*Plus.
The clinically required construction criteria and system components match each other, and the production methods are conveyed by qualified instructors.
Ask for current course offers.

Your benefit:

- **Acquisition of new customers**
- **Expansion of offers for the private insurant**

Our office and field consultants would be pleased to inform you about further details.

***Sleep*Plus**
Waiting room poster
2 pieces
REF 0P0008GB

***Sleep*Plus**
manufacturing manual
1 piece
REF 000322GB

***Sleep*Plus**
Patient flyer
20 pieces
REF 000 299G B

Assortment

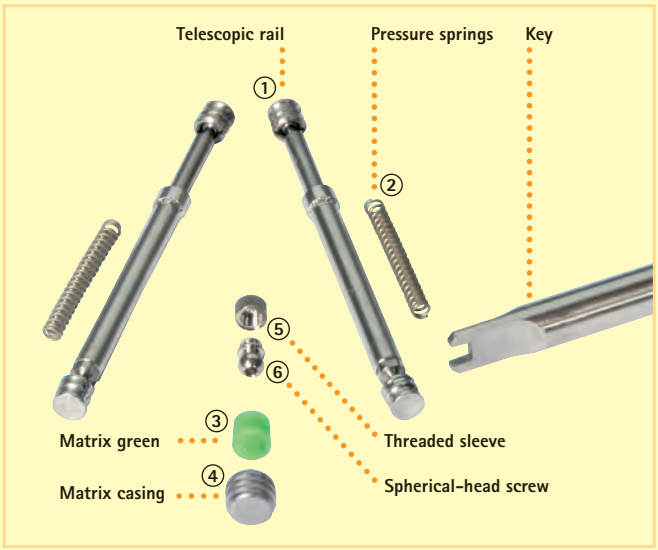
2 Telescopic rails
2 Pressure springs
1 Key
1 Spherical-head screw
1 Matrix, green
1 Matrix case
1 Threaded sleeve

REF 580 0119 0

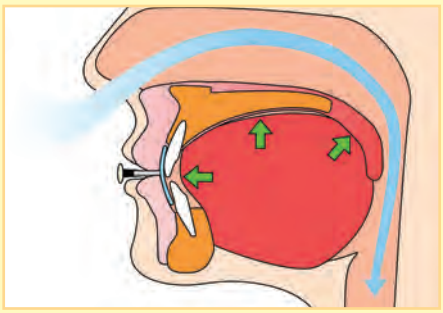
Refill package:

10	Telescopic rails Incl. 10 pressure springs	**REF 580 0119 1**
10	Pressure springs	**REF 580 0118 1**
1	Key	**REF 580 0119 2**
1	Spherical-head screw vks-oc/sg 2,2 titan	**REF 450 0004 7**
8	Matrices green vks-oc Ø 2,2 mm	**REF 430 0544 0**
2	Matrix case vks-oc Ø 2,2 mm	**REF 430 0696 0**
2	Threaded sleeve	**REF 580 0119 3**
1	Screwdriver short, Hexagon	**REF 330 0069 0**
1	Inserting Instrument vks-oc Ø 2,2 mm	**REF 430 0548 0**





Biofunctional therapy



Daily training with the vacuum activator helps to keep the lips closed and to create a self-contained state of rest within the mouth through swallowing.
This procedure is visualized by the pressure gauge of the device. The bio-functional therapy uses the vacuum activator's pressure gauge as bio-feedback signal for training the proper position of a self-contained state of rest.
The treatment steps are systematically controllable. Training procedure and training time are displayable via pressure monitoring. Therapeutic goal is a preferably permanent system stabilization of the self-contained state of rest.

This method was developed at the University of Göttingen/Germany under Prof. Dr. Dr. W. Engelke and is applied since 2003.

Literature: Engelke, W.: Systematische Ronchopathiebehandlung in der zahnärztlichen Praxis, Cuvillier Verlag, Göttingen.

The application is simple and may be integrated into the dental or orthodontic practice at any time.
An "oral-friendly" design and high class materials grant a high wearing comfort and encourage your patients' active cooperation.
We would, of course, be more than happy to send you a detailed information leaflet.

Basic exercise with silencos:
Low pressure is created in the mouth when collecting saliva and swallowing. After swallowing, breathing takes place steadily through the nose and the low pressure created is maintained. Active muscle tension is not required. The membrane responds to the pressure in the mouth. During basic exercise, the membrane should be drawn into the funnel; this indicates the correct adoption of the closed position at rest.
The exercises should be carried out several times a day for 15–30 minutes. The aim of the basic exercise is to learn the closed position at rest and maintain this in the long-term. The duration and frequency of the exercises is agreed between the patient and his/her therapist.

Vacuum activator *silencos* **for adult therapy**



***silencos* provides an effective primary snoring therapy without obstruction.**
Nasal respiration, the self-contained oral state of rest, and the velum are being trained through regular exercise and daily practice.
The mouth guard is made from soft, flexible silicon and can be worn with comfort.

Additional therapeutic possibilities are
- Practice of the self-contained state of rest
- Development of a nasal respiration habit
- Stabilization of tongue and velum
- Immobilization support for X-ray taking (OPG or CT)
- Closed mouth training
- Mobilization of the mouth base after tumor surgical measures
- Exercises to restore the oral functions within neurologic rehabilitation

silencos
incl. stora ge box
1 piece
REF 580 0600 0

silencos
Waiting room poster
2 pieces
REF 0P0004GB

silencos
Patient flyer
20 pieces
REF 000 274G B

Accessories:

silencos Membrane
5 pieces
REF 580 M600 0

silencos
Funnel
2 pieces
REF 580 T600 0

silencos
Stopper
5 pieces
REF 580 S600 0

bredent group

Vacuum activator *silencos kids* for early child therapy



Malocclusions and jaw malformations may be caused by incorrect swallowing patterns, pathologic mouth breathing or habits, such as thumb-sucking. These should be recognized and treated at an early stage.
The vacuum activator offers all functions of an oral vestibule plate (OVP), yet reaches far beyond the possibilities of the OVP, because the exercises are controllable via membrane.
silencos kids was especially developed for the preschool child.
The mouth guard is made from soft, flexible silicon and can be worn with comfort.

Additional therapeutic possibilities are
- Controlled habit manipulation, such as thumb-sucking, lip-biting
- Balance of forces within the orofacial system
- Adaption of a natural rest tongue position
- Myofunctional dysfunctions
- Treatment of habitually conditioned incorrect tongue positions
- Frontal open bite therapy
- Adenotonsillectomy aftercare
- Habitual dysfunction therapy
- Play therapy

silencos kids
incl. storage box
1 piece
REF 580 0600 K

silencos kids
Waiting room poster
2 pieces
REF 0P0 005G B

silencos kids
Patient flyer
20 pieces
REF 000 278G B

Accessories:

silencos Membrane
5 pieces
REF 580 M600 0

silencos
Funnel
2 pieces
REF 580 T600 0

silencos
Stopper
5 pieces
REF 580 S600 0

silencos night device



***silencos* night device**
incl. storage box
1 piece
REF 580 N600 0

For use in the case of velar snoring or in the case of habitual breathing through the mouth.
The silencos night device is a silicon mouth guard. When combined with an individually manufactured maxilla splint, this closes the mouth from the outside and promotes breathing through the nose at night. This prevents flapping of the velum as a result of the air current produced when breathing through the mouth.
- Snoring sounds are clearly reduced or are prevented altogether. The device can only be used if the person using this can breathe through his/her nose adequately. The silencos night device is a favourable solution for snoring therapy and can be manufactured comparatively quickly. It works like a curtain in the vestibule of the mouth and promotes breathing through the nose as a result of this. The elasticity of this allows for a sufficient level of movement of the jaw and offers the patient a high level of comfort.

Due to the connection to the maxilla splint, the guard is always correctly positioned in the vestibule of the mouth, even if the mouth is open.
Before using for the first time, it should be checked on the model or by the dentist on the patient whether there are any irregularities in the area between the lips, cheeks and dental arch, such as e.g. a deep-set labial frenulum or an unfavourably shaped oral vestibule. In case the labial frenulum or oral mucous membranes are compressed by the device, the edges can be reduced appropriately with a scissors.
We recommend using the *silencos* Night device in combination with the *silencos* Vacuum activator and biofunctional treatment. Regular therapeutic training stabilises the mouth and throat muscles and leads to habitual correctness of the tongue position.



Retaining elements made from wire are inserted in the molar region...



...on an individually manufactured maxilla splint (e.g. in deep-drawn procedures).

The retaining elements are individually bent from e.g. 0.9 or 1.0 mm hard wire and fixed to the maxilla splint using plastic.



Thea mouth guard is then attached to the openings of the silencos night device in the molar region. The soft, smooth material can be shortened using scissors or a silicon shaper if required.

BETTER QUALITY OF LIFE – BACK TO A HEALTHY SLEEP



Snoring has become the most widespread disease. In 50% of bedrooms, healthy sleep is disturbed by extreme snoring – this can be as loud as 90 decibels, which corresponds to the noise of a passing lorry.

Two forms of treatment are available. The protrusion splint, which is worn in the case of slight or medium obstructive sleep apnoea syndrome, and biofunctional treatment with a vacuum activator, are used in the case of primary snoring without obstruction.

Become an advisor for your practice and establish your laboratory's position in a new and attractive area of business. Comprehensive information material is available for laboratories, practices and patients.

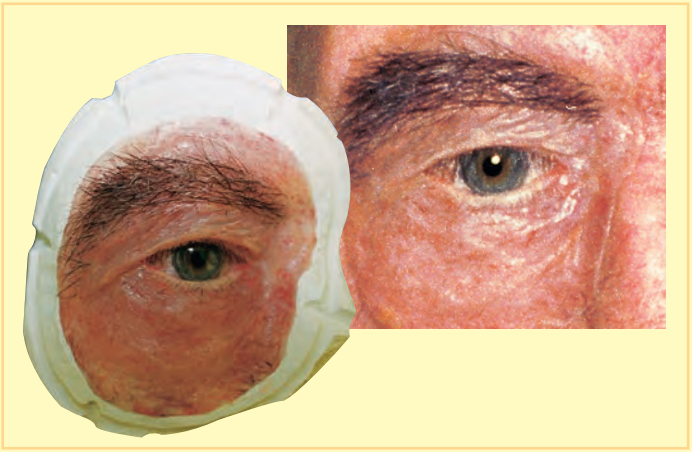
Added value for your laboratory!

All individual components have been exclusively developed by experienced epitheticians. The technique that can be learned in courses opens new business fields to your laboratory.

Future developments which allow lasting bonding of metal/silicone and silicone/silicone will become milestones in the field of epithetics.

The advantages of soft silicone and hard epithelial resin combined in a soft resin provide the basis for additional new developments.







Starter set for silicone epithetics
Multisil-Epithetics Set ... 370
Impression material
Multisil-Epithetics soft-form and hard-form ... 370
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Modelling wax for epithetics ... 371
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Multisil-Epithetics Set



Starter set to produce a silicone epithesis.

- Content of the case prepared in cooperation with experienced epitheticians
- Contains all materials required to produce a silicone epithesis
- Robust aluminium case and clearly arranged comparments to find the necessary materials quickly

Multisil-Epithetics Set

1	aluminium case with foam lining
20	mixing cannulas, pink
1	dosing device
1	brush
1	mixing spatula for epithetics
1	sliding caliper
30	ml Isoplast ip
5	ml Multisil-Epithetics thickener
5	ml Multisil-Primer
10	different intensive colors, 5 g each
10	different fibers, 2.5 g each
10	vdifferent stains, 5 g each
2 x 50	ml Multisil-Epithetics soft-form
2 x 50	ml Multisil-Epithetics hard-form
1 x 50	ml Multisil-Epithetics city
1 x 50	ml Multisil-Epithetics country
1 x 50	ml Multisil-Epithetics beach
3 x 50	ml Multisil-Epithetics transparent

REF 540 0106 0





Accessories:

12	Mixing cannulas, pink	**REF 320 0045 2**
1	Dosing device	**REF 320 0044 0**
1	Brush, size A + holder	**REF 330 0114 6**
1	Brush, size C + holder	**REF 330 0114 8**
1	Mixing spatula, epithetics	**REF 320 0045 3**
1	Sliding caliper	**REF 320 0045 4**
750 ml	Isoplast ip	**REF 540 0101 9**
1	Mixing block	**REF 320 0045 5**
80	PE-foil cut-outs	**REF 320 0045 6**

Multisil-Epithetics soft-form and hard-form

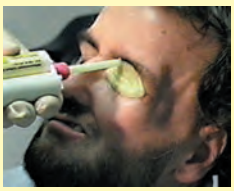
Soft-form



Impression material for epithetics on 1:1 silicone basis in time- and material-saving double mixing cartridges.

Multisil-Epithetics
soft-form
2 x 50 ml
REF 540 0106 1

- Due to the low hardness of 25 Shore A it is particularly suitable for undercut areas
- Extreme firmness ensures reliable impression-taking



Multisil soft-form to reproduce undercut areas.

Hard-form



Multisil-Epithetics
hard-form
2 x 50 ml
REF 540 0106 2

- The hardness of 45 Shore A provides stability for larger surfaces and for covering Multisil-Epithetics soft-form
- Extreme firmness simplifies reliable impression-taking



Multisil hard-form – for covering and stabilizing Multisil soft-form.

Modelling wax for epithetics mdwe



Skin-colored plate wax for epithetics.

Modelling wax for epithetics mdwe
75 x 150 x 2.8 mm
1000 g
REF 430 0739 6



- thickness of 2.8 mm adjusted softening temperature optimal hardness, improved plasticity well-balanced stickiness, which is perfectly matched with the epithetics, ensure quick and reliable modelling
- After heating, the modelling wax can be shaped for an extended time and so modelling of the epithesis is simplified.

Multisil-Epithetics transparent



Multisil-Epithetics
transparent
2 x 50 ml
REF 540 0106 3

transparent

Transparent, soft epithelial material on 1:1 silicone basis.
- Convenient double mixing cartridge for consistent mixing quality
- Crystal-clear silicone for optimal, individual coloring with Multisil intensive colors
- Extended processing time of two hours at room temperature provides sufficient time for individualizations
- Simple polymerizing at 60° C does not require special equipment
- Final hardness of 35 Shore A and high tear strength ensure comfort of wear for the patient
- Fine flow behavior of the silicone allow most accurate reproduction of details of the model

Multisil-Epithetics city / country / beach



Multisil-Epithetics
city
50 ml
REF 540 0106 4

city



Multisil-Epithetics
country
50 ml
REF 540 0106 5

country



Multisil-Epithetics
beach
50 ml
REF 540 0106 6

beach

Colored, soft epithelial material on 1:1 silicone basis.
- 3 different skin tones simplify coloring of the epithesis:
  city = bright skin type
  country = normal skin type
  beach = dark skin type
- Mixing in Multisil-Epithetik transparent saves time during invididualizing
- Individual coloring with Multisil stains adds new possibilities of shade adaptation
- Final hardness of 35 Shore A and high tear strength ensure comfort of wear for the patient
- Fine flow behavior of the silicone allow most accurate reproduction of details of the model



Coloring and characterization of epithetics

Multisil stains



Stains for surface characterization.
10 different stains provide all options of optimal adaptation to the patient situation.



Multisil stains
Glass jar, cont. 5 g

color	REF
white	540 0108 0
yellow	540 0108 1
red	540 0108 2
blue	540 0108 3
black	540 0108 4
green	540 0108 5
violet	540 0108 6
light-brown	540 0108 7
brown	540 0108 8
dark-brown	540 0108 9

Multisil-Epithetics thickener



To change the viscosity of addition-linked silicones.

Multisil-Epithetics thickener
transparent
5 ml
REF 540 0106 8



Silicone without Multisil-Epithetics thickener.



Silicone with Multisil-Epithetics thickener renders the silicone firm and simplifies layering of the epithesis.

Multisil-sealing agent



Sealing varnish for silicone surfaces.

Multisil-sealing agent
transparent
10 ml
REF 520 0100 5



Sealing the base of the epithesis avoids the accumulation of dirt and secretion and thus simplifies cleaning.

Multisil-Primer



Multisil-Primer
Bonding agent

Multisil-Primer
5 ml
REF 520 0100 4



Optimal bonding of silicone and acrylic resin.

Telephone (+49) 0 73 09 / 8 72-4 40

Multisil intensive colors



Silicone colors for coloring addition-linked silicones.

- 10 different intensive colors provide comprehensive possibilities of color characterization
- High color stability avoids discoloration of the epithesis



Multisil intensive colors
Glass jar, cont. 5 g

color	REF
white	540 0107 0
yellow	540 0107 1
red	540 0107 2
blue	540 0107 3
yellow-ochre	540 0107 4
red-yellow	540 0107 5
umber	540 0107 6
suntan	540 0107 7
neutral	540 0107 8
brown	540 0107 9

Multisil fibers



Viscose fibers for characterizing epithetics.

- 10 different intensive colors provide comprehensive possibilities of color adaptation and characterization
- Special, thin fibers allow perfect reproduction of blood vessels, downy hair, etc.



Viscose fibers with different colors especially matched with the requirements of epithetics.

Multisil fibers
Plastic jar, cont. 2.5 g

color	REF
silver	530 0060 0
white	530 0060 1
beige	530 0060 2
signal red	530 0060 3
ruby-colored	530 0060 4
purple	530 0060 5
bordeaux	530 0060 6
blue	530 0060 7
mocha	530 0060 8
ochre	530 0060 9

Matt sealing agent for epithetics



Matt surface sealing for addition-curing silicones.

- Creates a matt surface on silicone epithetics and thus ensures a natural appearance of the epithesis
- Prevents the stain coat from coming off the sur face and thus offers extended comfort of wearing
- Contains a UV protective varnish for the silicone colors and stains and provides lasting protection against fading
- Simple handling ensures reliable and permanent sealing of the surface of the epithesis

Matt sealing agent for epithetics
Primer
10 ml
REF 540 0109 1

Matt sealing agent for epithetics
Coating
20 ml
REF 540 0109 2

Matt sealing agent for epithetics
Matting powder
10 g
REF 540 0109 3

Assortment

3 pieces
1 Matt sealing agent for epithetics, Primer
1 Matt sealing agent for epithetics, Coating
1 Matt sealing agent for epithetics Matting powder

REF 540 0109 4





A thin coat of primer is applied on the surface of the epithesis.



Multisil stains allow further characterization of the epithesis.



Uniform, thin layers of coating are dabbed on using a brush.



Allow to dry for approximately two minutes at 65° C (e.g. hot-air blower).



The matting powder is spread on after 15 minutes.



Place the epithesis in hot water for two minutes.

Devices – the best quality for demanding jobs

The devices produced in Germany offer the highest quality and reduce the amount of work required, which saves time. Specially developed by dental technicians for the fields of work relevant to dental technicians.



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ecovac vacuum mixing system



ecovac

Precision-fit restorations obtained through optimal use of material properties.
The user-friendly and compact design simplifies work and reduces sources of errors. A powerful and maintenance-free vacuum pump, adjustable in two different levels (15 mbars, 200 mbars), ensures bubble-free mixing of materials and results in a perfect casting surface. Stirring time and speed can be adjusted continuously to allow correct processing of different materials.

ecovac (230 V) **REF 140 0093 0**

(Wall mounting, without mixing cup and base)
1 mains cable
1 spare filter
1 drilling template for wall mounting
4 screws and plugs for wall mounting

Accessories:

base ecovac, 1 piece **REF 210 0045 0**



ecovac mixing spiral

The mixing spiral takes up the components to be mixed from all areas of the mixing cup and stirrs them horizontally and vertically. No unmixed materials will remain on the bottom of the mixing cup, which may cause different expansion of the material later on.
All features and components listed provide increased reliability, lead to improved fit when preparing dental restorations and avoid time-consuming reworking.

Mixing spiral,	50 ccm	**REF 140 0R94 5**
Mixing spiral,	250 ccm	**REF 140 0R94 0**
Mixing spiral,	750 ccm	**REF 140 0R94 2**
Mixing spiral,	1000 ccm	**REF 140 0R94 3**



ecovac mixing cups

The smooth inner surface of the stainless steel mixing cup prevents any material or liquid residues from adhering to or depositing in scratches or undercuts. The conical shape ensures that material which has been taken up will flow back to the center of the mixing cup. Accordingly, the mixing ratio is retained exactly and better results can be achieved with minimal effort.

Mixing cup,	50 ccm	**REF 140 0B94 5**
Mixing cup,	250 ccm	**REF 140 0B94 0**
Mixing cup,	750 ccm	**REF 140 0B94 2**
Mixing cup,	1000 ccm	**REF 140 0B94 3**



Mixing cup, D
(for the use in the Degussa mixing unit),
425 ml

REF 140 0B94 4

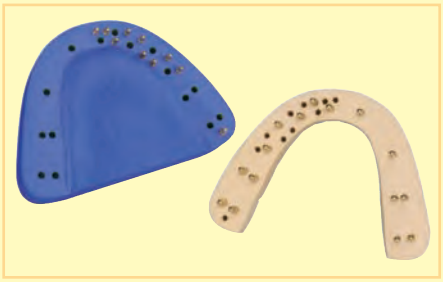
Master pin drill unit mpb 1

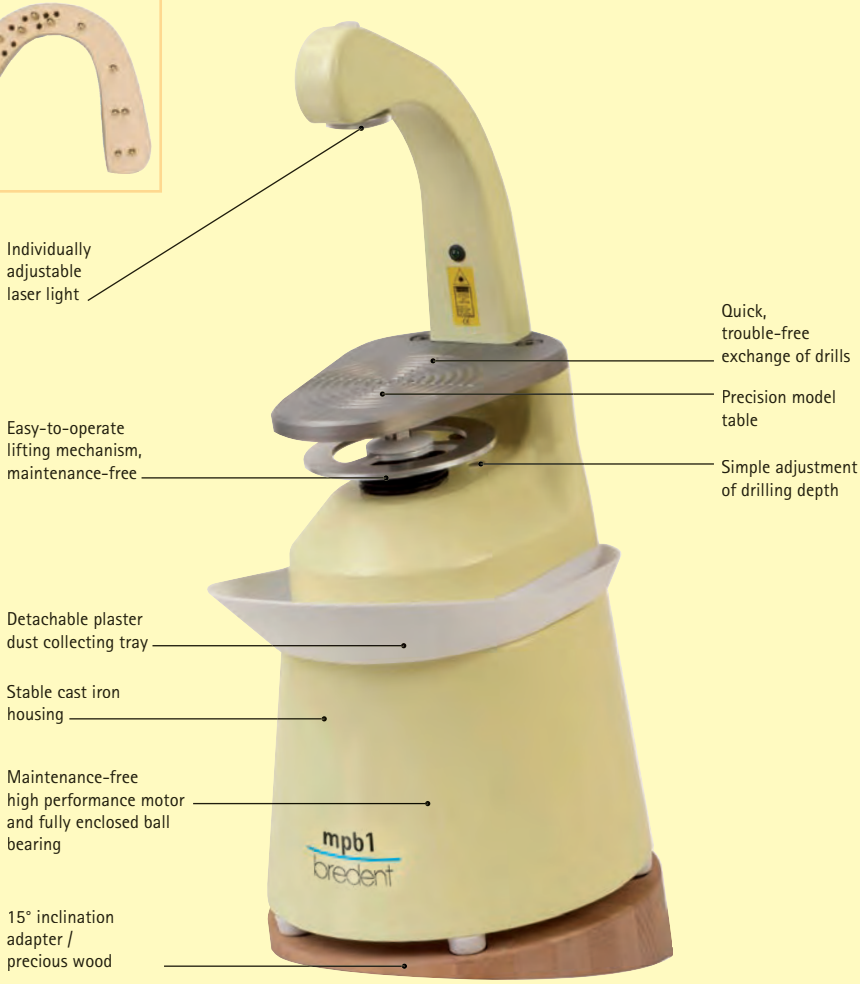
The powerful, high quality and maintenance-free motor features high true running accuracy.

Accordingly, the precision of the drilled hole and the accuracy of the models are increased. Working is simplified thanks to the easy-to-operate lifting mechanism.

Master pin drill unit mpb 1 REF 140 0092 0
(without 15° base)

1 spare fuse
1 Master-Pin Diatit tungsten carbide bur standard/green
1 flat wrench
1 plaster collecting tray
1 plug axle
1 power cord





Accessories:



Adapter base
15° inclination / precious wood
REF 210 0044 0



Tungsten carbide drill
Special drill for Master-Pin Radix-K
Ø 2,0 mm
3 mm shaft
REF 360 0123 3



Master-Pin Diatit tungsten carbide step drill standard/green
REF 360 0119 2



Master-Pin Diatit tungsten carbide step drill special/yellow
REF 360 0119 3

If glueing in of the Master-Pin is too difficult, the special/yellow Master-Pin Diatit tungsten carbide drill can be used to prepare a larger drillhole. The diameter of this drill is 0.1 larger than the one of the standard/green Master-Pin Diatit tungsten carbide drill.

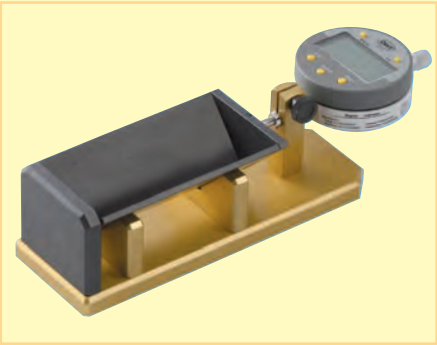


Master-Pin Diatit tungsten carbide step drill special/red
REF 360 0119 4

If the drilled hole is too large to receive the Master-Pin, the special/red Master-Pin Diatit tungsten carbide drill can be used to prepare a smaller drillhole. The diameter of this drill is 0.01 mm smaller than the one of the standard/green Master-Pin Diatit tungsten carbide drill.

KoEx Measuring Device

Why are there fitting differences between the model and the actual situation in the mouth? Thanks to the KoEx measuring device, material measurements of contraction and expansion are now possible for the first time.



Facilitating contraction and expanding measurements for the first time

Why do discrepancies in fit exist between the cast and the intraoral situation?

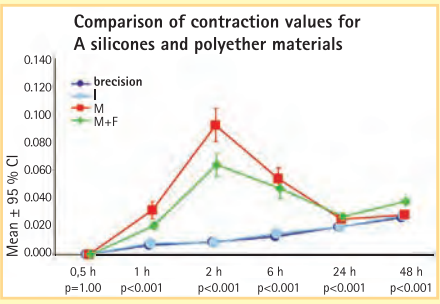
KoEx Measuring Device
1 piece including
2 contraction inserts
REF 110 0148 0

Impression Materials, Contraction

Studies have indicated that impression materials differ greatly in their contraction (shrinkage) behavior, reproducing the oral situation inaccurately. The brecision impression material provides



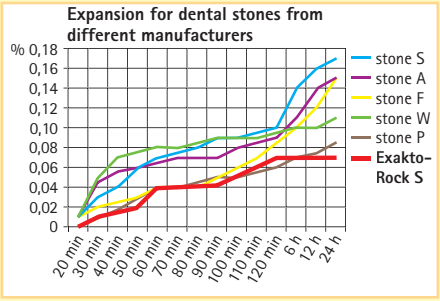
stable values after two hours, permitting further processing to be performed rapidly.



Dental stone, Expansion

Check the expansion values for your dental stone materials and compare them to those of bredent's Exakto-Rock S. Exakto-Rock S expands by a maximum of 0.06 % after two hours; after 48 hours, the expansion is still less than 0.08%.



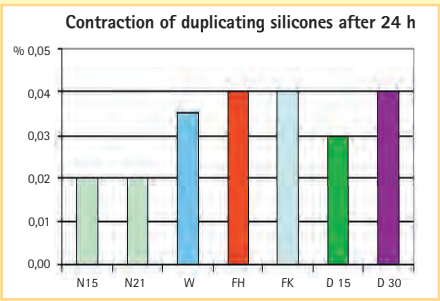


Silicone duplicating materials, Contraction

Contraction measurements of different silicone duplicating materials have shown substantial differences between these. Exaktosil N15 was stable at 30 minutes, at 0.02 %. The values for other



duplicating silicones changed after 24 hours, adversely affecting the fit of the restoration.



Investment compound, Expansion

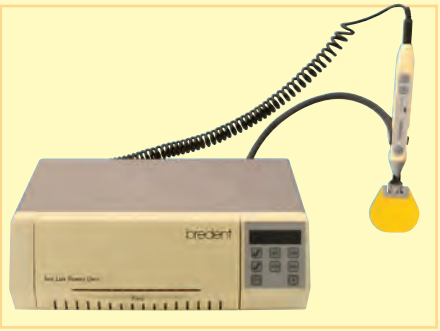
Investment compounds that can be controlled exactly and individually are a prerequisite for non-precious alloy precision one-piece attachment



casting as well as for K+B plastic injection molding using thermo press 400.

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Telephone (+49) 0 73 09 / 8 72-4 40

bre.Lux



Polymerization Multi Talent for Practice and Laboratory

To date, several devices were necessary for processing facing and dental materials. With bre.Lux, the concept of processing all current materials with one single device becomes reality for the first time.

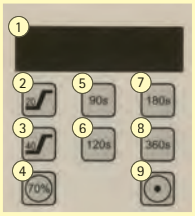
Assortment

bre.Lux Power Unit
Product package consists of
1 polymerization device
1 bre.Lux LED N manual lamp with spiral cable
1 bre.Lux UpDown
1 flexible hose
1 mains cable

REF 140 0097 0

Performance

- Fixation / Hardening / Intermediate polymerization and final thorough hardening directly in the workplace and with one single device
- 370 - 500 nm covers the needed wavelength range, for the manual lamp as well
- Performance delay and reduction minimize the properties and results of dental materials
- Start-up delay and polymerization time can be easily combined
- Large volume for 2 models, optimally and uniformly



Keyboard layout of the light polymerization device

(1) Display
(2) 20 seconds with 50 % power
(3) 40 seconds with 50 % power
(4) Continuous operation with 70 % power
(5) 90 seconds full power
(6) 120 seconds full power
(7) 180 seconds full power
(8) 360 seconds full power
(9) Continuous operation at full power

Keyboard layout for the manual lamp



(1) Continuous operation, start/stop
(2) 15 seconds
3) 30 seconds

Consistency

The membrane keyboard already comes with several parameters. On the left side: Reduced power for the start-up phase with 20 and 40 seconds and for continuous operation at full power as well. The combination (such as start with reduced power) can be combined with the programmed running times of 60 to 360 seconds according to demand. Example: 40 seconds with reduced power combined with a 180-second total running time means that the total running time is lowered from 180 to about 40 seconds, and the running time would still be 140 seconds under full power.
Please take note of the application recommendations for bredent products.



Energy

The bre.Lux Power Unit consists of one LED light polymerization device with 21 power LEDs in 3 different capacities, from 370 nm to 500 nm. The LEDs have a useful life of 20,000 hours.
The bre.Lux LED N manual lamp (with spiral cable) features a capacity ranging from 370 nm to 500 nm. The flexible hose – with receptacle ring for the manual lamp – serves as third hand and allows two-handed work.

Polylux 2

The powerful and universally applicable light-hardening device for materials with a wave length range of 350 to 500 Nm.



Two different and energy-saving special lamps guarantee excellent polymerization. Moreover, perfect distribution of light ensures careful and appropriate curing of the materials.

- Convenient and simple operation thanks to clearly arranged buttons
- Fully mirrored polymerization area for selective illumination with compact drawer
- Device can be accessed from three sides to enable polymerization of large objects
- lower energy consumption for a cost-effective service life

Technical data

Number of light sources	2 fluorescent lamps, 9 watts each
Wavelength range	350 – 500 Nm
Triple timer function	180 sec/360 sec/continuous operation
Mains voltage	115 V, 50 Hz / 230 V, 50 Hz
Dimensions of unit	approx. 250 x 120 x 90 mm
Dimensions drawer	approx. 140 x 110 x 55 mm
Weight	approx. 1500 g

Polylux 2 with drawer, 230 V **REF 140 0099 0**
Polylux 2 with drawer, 115 V **REF 140 0099 1**

Protective chamber



The protective chamber avoids inhaling of dust, protects your eyes and, consequently, protects your health. Available with or without extraction nozzle. The extraction nozzle can be directly connected with the extraction system.

Protective chamber with extraction nozzle **REF 220 0010 0**
Dimensions: approx. w 410 x d 350 x h 260 mm
Ø 35 mm

Protective chamber without extraction nozzle **REF 220 0011 0**
Dimensions: approx. w 410 x d 350 x h 260 mm

for 2 press and BioHPP



***for* 2 press vacuum-press system for the manufacture of metal-free, biocompatible dental prosthesis.**
With the *for* 2 press vacuum-press system, the thermoplastic high-performance polymer BioHPP is processed in a mould made from a phosphate-bonded investment material. The end result is a metal-free, white framework construction, which can be veneered perfectly with conventional veneering composites in a customised, aesthetically pleasing manner. The dental prosthesis made from BioHPP is certified for permanent applications.
The melting process of the BioHPP high-performance polymer is carried out in the pre-heating furnace already available to you. The subsequent pressing process is fully automated and takes place in a vacuum.

***for* 2 press device**
1 piece
REF 140 0060 0

***for* 2 press Basic Set**
1 x *for* 2 press mould (consisting of a mould plate 3/16 mm and silicone ring, 35 x 210 g
Brevest *for* 2 press EBM incl.
2 litre Bresol *for* 2 press liquid,
25 x *for* 2 press filler 16 mm (one-way extrusion die for moulding the material in the mould
20 g BioHPP, 1x processing instructions
REF 140 0060 1



After the investment material mould has been pre-heated in the pre-heating furnace and the modelling wax or plastic has melted, the BioHPP is melted at 400° C, also in your pre-heating furnace. Immediately afterwards, the mould with the melted BioHPP and with the fitted one-way extrusion die is moved into the *for* 2 press vacuum-press device. The raising of the lift triggers the automatic pressing process in a vacuum atmosphere.



After the 3-minute pressing process, which includes the application of a vacuum, the cooling process begins, while maintaining the pressing pressure. This is the only way to guarantee that the material properties of the BioHPP are exploited fully.



After 35 minutes in total, the entire pressing process is completed and the user is informed of this by an acoustic signal and an optical LED display. Now the BioHPP framework structure can immediately be divested and processed further.



Sample application using a 3-part bridge made of BioHPP veneered with visio.lign veneers.

Image: Dental technical certified company Harald Schwindt.

Technical data *for* 2 press

Power supply	90 - 250 volts, 50 - 60 Hz
Power consumption	15 watts
Vacuum performance	
Venturi nozzle	approx. 760 mbar
Weight	13 kg
Size (W x H x D)	250 x 600 x 290 mm
Protection class	IP 34
Sound level	< 70 dB
Input air pressure	min. 4.5 to 6 bar max.
Hardware protection	T 2.5 A

Accessories:

High Performance Polymer
BioHPP, 20 g **REF 540F2PB2**
BioHPP, 100 g **REF 540F2PB3**

Mould system
***for* 2 press mould set,**
16 mm, third mould plate 16 mm and third silicon ring **REF 360F2P16**
***for* 2 press mould set,**
20 mm, ninth mould plate 20 mm and ninth silicon ring **REF 360F2P20**

***for* 2 press silicone ring,** Gr. 3 silicone ring Gr. 3 **REF 360F2PR3**
***for* 2 press silicone ring,** Gr. 9 silicone ring Gr. 9 **REF 360F2PR9**

***for* 2 press mould plate,** Gr. 3 mould plate Gr. 3 **REF 360F2PT1**
***for* 2 press mould plate,** Gr. 9 mould plate Gr. 9 **REF 360F2PT2**

One-way extrusion die
***for* 2 press filler,** 16 mm, 25 piece **REF 570F2P16**
***for* 2 press filler,** 20 mm, 25 piece **REF 570F2P20**

Investment material
Brevest *for* 2 press, 35 x 210g, 1000 ml Bresol **REF 570F2PV1**
Bresol *for* 2 press liquid 1000 ml **REF 520F2PL1**

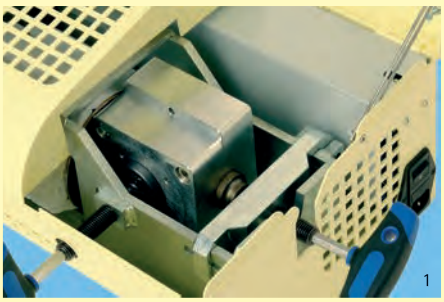
thermopress 400



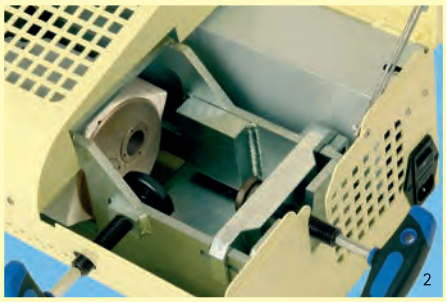
Injection moulding device for the processing of thermoplastic plastics with a melting temperature of up to 400° C

- No additional equipment such as CO_2 cylinder or a compressed-air connection required. This way, additional costs and time are saved. The same level of quality is maintained by avoiding a drop in pressure.
- Higher user comfort during handling of the device.
- Time-saving function thanks to simultaneous operation of both heating chambers.
- The injection process can only be performed with the lid closed; additional safety is provided. Convenient removal of the flask thanks to automatic cartridge ejection if the bracket is unlocked.

thermopress 400
1 unit with power cord
2 allen keys
1 cleaning brush
1 special tool
REF 110 0040 0


1

The melting process is adapted to the requirements of the plastic thanks to special high-performance heating elements. This ensures that the best possible mechanical material properties are achieved.


2

The compression forces of up to 2 kN occurring on the special cuvette are absorbed by a special conduction and fastening system into the device. This guarantees that the melted thermoplastic plastic is injected into the cuvette hollow mould without any air pockets and without deformation.

3



All 6 different processing parameters are stored in the device software. In total, up to 30 user-friendly melting programmes are stored in the device.

bredent group
Telephone (+49) 0 73 09 / 8 72-4 40

thermopress 400

Technical data thermopress 400

Width	650 mm
Height	250 mm
Depth	300 mm
Weight	40 kg
Voltage	220 - 230 V
Power	0.5 - 1.6 kW max. 2.2 kW

Accessories thermopress 400:

1 press-out device and punch*	**REF 140 0090 4**
1 pair of cartridge pliers*	**REF 140 0090 6**
1 flask hook with hex*	**REF 140 0091 2**
1 flask N, small* (l 122 cm, w 102 cm, h 72 cm)	**REF 140 0090 3**
1 flask N, large (l 140 cm, w 102 cm, h 72 cm)	**REF 140 0090 5**
1 cleaning brush	**REF 110 0040 2**
1 thermopaste 400 special paste, 50 g*	**REF 540 0105 1**
Expando-Rock-Set 5 kg expansion plaster, 500 ml Expandosol	**REF 570 0ERS 5**

thermopress 400 accessories assortment (device)

7 pieces

REF 110 0040 1

View above, accessories thermopress 400:
articles marked with * are included in thermopress 400 accessories assortment!

thermopress introductory assortment (20 cartridges)

5 x 30 g	bre.crystal HP pink 1	2 x 20 g	bre.flex pink
3 x 24 g	bre.crystal HP clear	2 x 16 g	bre.dentan HP A
5 x 24 g	bre.flex 2nd Edition pink veined	3 x 16 g	Bio Dentaplast A2

REF 140 0090 2

Patient information brochure
thermopress sensitive
REF 000 415G B

thermopress 400 patient pass
REF 000 628G B

thermopress 400 information brochure
REF 992 945G B

thermopress 400 patient information
REF 000 135G B

Training and further education programme
2-day course (Senden)
REF 950 0020 0

thermopress 400 range S1 (20 cartridges)

2 x 30 g	bre.crystal HP pink 1	1 x 20 g	Bio-Dentaplast A3
2 x 24 g	bre.crystal HP pink	1 x 20 g	Bio-Dentaplast A3
5 x 24 g	bre.flex 2nd Edition pink veined	1 x 250 ml	Acryl Sep
		1 x 20 ml	light-hardening Stumplack transparent
1 x 24 g	bre.crystal HP clear		
5 x 16 g	bre.dentan HP A	1 x 50 g	thermopaste 400

REF 540 S000 1

thermopress 400 range S2 (20 cartridges)

5 x 16 g	Bio Dentaplast A2	5 x 16 g	Bio Dentaplast B3
5 x 16 g	Bio Dentaplast A3	1 x 250 ml	Acrylic Sep Acrylic/plaster separating liquid
5 x 16 g	Bio Dentaplast B2		

REF 540 S000 2

CPS Cordless Prosthodontic Screwdriver



How much time do you spent loosening and fixing implant screws?
You can save app. 50 % of the time using the CPS.

Are you sure that your screws are always tight correctly?
With CPS there will be no screw loosenings due to wrong torque.

Can you reach your palatinal screws easily?
With CPS you have a perfect cordless access to all sites, because it is cordless.

CPS Cordless Prosthodontic Screwdriver
- Cordless motor
- Battery runtime for 40 screws
- Charging point
- Handpiece 80:1
- Screw drivers:

REF 580 CPS4 0

Hexagon



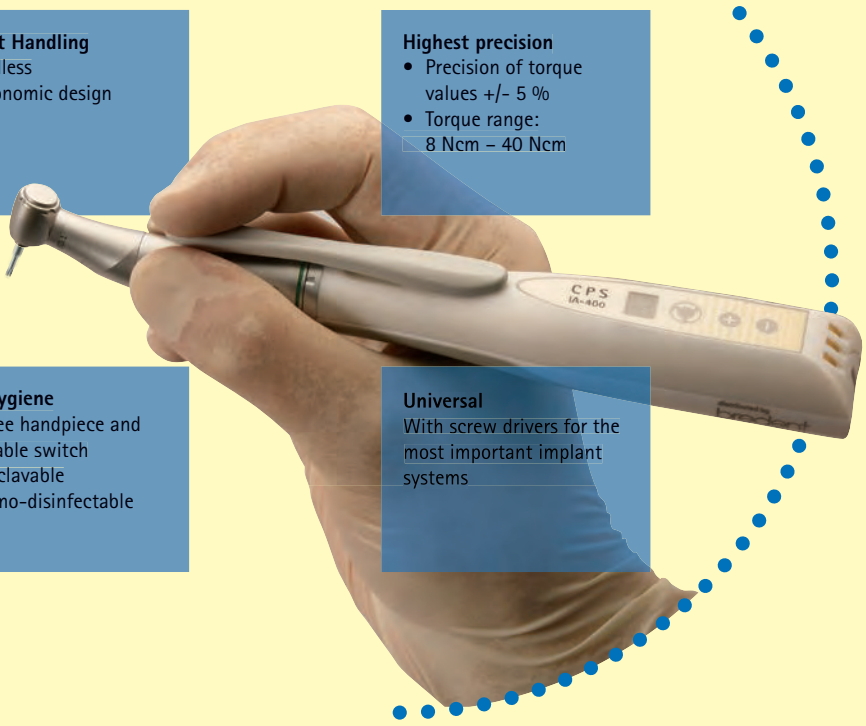
Torx



Slot

Perfect Handling
- cordless
- ergonomic design

Highest precision
- Precision of torque values +/- 5 %
- Torque range: 8 Ncm – 40 Ncm



Best hygiene
Lubefree handpiece and removable switch
- autoclavable
- thermo-disinfectable

Universal
With screw drivers for the most important implant systems

bredent group

Telephone (+49) 0 73 09 / 8 72-4 40

Waxpool duo



Waxpool duo unit
REF 110 0150 0

Waxpool duo handpiece
REF 110 0151 0

Assortment

4 parts
1 Waxpool duo unit
1 Waxpool duo handpiece
2 Waxpool duo contouring blades at your choice
REF 110 0152 0

Wax dipping unit and wax knife all in one – digital control for added comfort
- Stable and easy to clean plastic housing
- Exchangeable plastic lids
- Clear design
- °C or °F can be selected

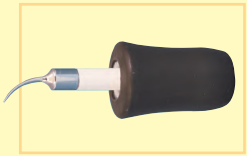
Wax dipping unit
- Precise temperature control of the dipping wax for increased quality
- High-performance heating elements reduce the time for heating the wax
- Uniform wax copings thanks to constant temperature control
- Special, lowered safety dipping wax to avoid burning of fingers
- Melting temperature up to 120° C

Wax knife
- A separate wax knife can be connected
- A single unit at the working place
- Non-tiring working thanks to ergonomic design of the handle
- Special insulating elements reduce heating up of the handle
- Simple exchange of blades
- Boost key for quick heating up to the end temperature
- Maximum temperature of 240° C

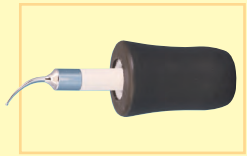
Accessories:



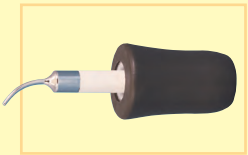
Rest
REF 140 0096 5



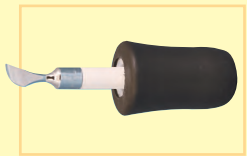
Contouring blade size 1
REF 320 WP4G 1



Contouring blade size 3
REF 320 WP4G 3



Contouring blade size 5
REF 320 WP4G 5



Contouring blade standard
REF 320 WP47 2

Wax knife bwm 3



Control unit bwm 3
with handpiece and contouring blade size 5
REF 140 0096 3

Control unit
bwm 3
REF 140 0096 0

Handpiece
bwm 3
REF 140 0096 2



Rest
bwm 3
REF 210 0045 1



Footswitch
bwm 3
REF 140 0096 1

Accessories:

Foam rubber grip lining
4 pieces
REF 140 0096 4

Electric wax knife featuring integrated advanced technology and high quality. The ergonomic handpiece allows to take up wax quickly and ensures comfortable working.

- Ergonomically designed handpiece
- Quick heating up with the Rapid-Speed footswitch
- Adjustable temperature control
- Simple and fast exchange of the contouring blades



Contouring blade bwm 3 size 1	**REF 320 004G 1**
Contouring blade bwm 3 size 3	**REF 320 004G 3**
Contouring blade bwm 3 size 5	**REF 320 004G 5**
Contouring blade bwm 3 Standard	**REF 320 0047 2**



Comfortable and quick removal of the contouring blades.



Device for firm, reliable hold of the handpiece at the unit.



Mobile rest for safe depositing of the handpiece.



Blade shapes proven over numerous years allow individual application.



Integration into the grip for quick and simple exchange of the contouring instruments without the risk of injuries.



The special instrument grip avoids twisting of the contouring tip whilst working.



The contouring tips are stored on the control unit in a safe and clearly arranged manner.



If the wax knife is not needed, it can be placed on the rest in the direct reach of the technician.



The footswitch allows to quickly reach a higher temperature than the one that has been set. Activation of the footswitch is indicated by the control lamp.



Logical and clearly arranged control unit for stress-free and safe working.



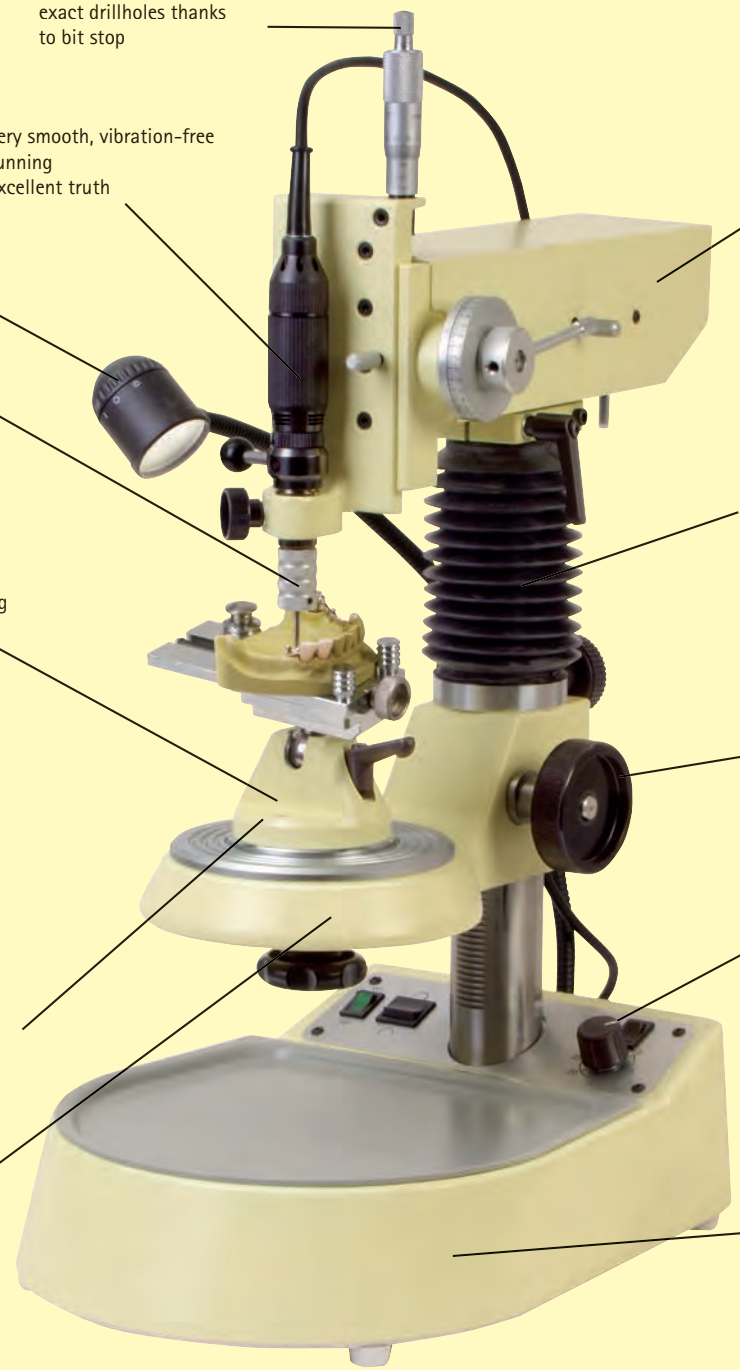
Handpiece with flexible, stable cable for simple working.



High-tech dental equipment featuring highly useful function and design - for comfortable and simple working.

bredent group

Precision guides ensure perfect milling and drilling results.



Milling unit BF 2
including 1 Model support BF 2
1 piece
REF 140 0098 0

Technical Data

Power supply	230 Volt / 50/60 Hz
Power rating	80 Watt
Speed	0 - 30,000 U/min.
Chuck	Ø 2.35 mm
Fuse	thermal overload protection
Torque	2.6 Ncm
Weight	18 kg
Width/Depth/Height	250 x 370 x 510 mm

Accessories

Chuck 2.35 mm	**REF 730 0016 9**
Chuck 3 mm	**REF 730 0015 3**
Tap handwheel	**REF 330 0115 4**
Model support BF 2	**REF 730 0017 0**
Milling base	**REF 140 0089 3**
Adapter airaqua turbine	
16 mm	**REF 730 0018 4**
18 mm (for BF1)	**REF 730 0018 3**
28,5 mm	**REF 730 0018 5**
Transfer device	
3 mm shaft	**REF 360 0116 3**
2.5 mm shaft	**REF 360 0126 5**

Milling base



Milling base with integrated thread for fixation on the milling base of the BF 1 unit. Additionally, plaster is removed completely and without damaging the metal plate by slightly turning the locking bolt.

Milling base
1 piece
REF 140 0089 3



Model support BF 2



The model support can be used for all milling units including units with magnetic circuit. Turning by 90° permits do perform lateral drilling of bars without removing the model.

Model support BF 2
1 piece
REF 730 0017 0



Transfer device



Permits correct transfer of the position of the model to the milling base. Up to 8 units can be transferred at the same time.

Transfer device
3 mm Schaft
REF 360 0116 3

2,35 mm Schaft
REF 360 0126 5

Brenometer surveying system



Brenometer surveying system

Four different surveying plates according to Ney allow accurate positioning of the clasp profiles whilst ensuring correct depth of undercuts. A locating pin and a red marker with a holder ensure correct surveying.



Marking the clasps and surveying with a single unit – this is how time and money can be saved.

Assortment

1 Brenometer marker holder
1 Brenometer locating pin
1 Brenometer plate 0.25
1 Brenometer plate 0.35
1 Brenometer plate 0.50
1 Brenometer plate 0.75

REF 310 0000 2

Refill packages:

Brenometer marker holder	**REF 310 0000 4**
Brenometer locating pin	**REF 310 0000 3**
Brenometer plate 0.25	**REF 310 0002 5**
Brenometer plate 0.35	**REF 310 0003 5**
Brenometer plate 0.50	**REF 310 0005 0**
Brenometer plate 0.75	**REF 310 0007 5**

airaqua turbine



airaqua turbine is a handy, compact unit with a light-weight handpiece for precise processing of hard materials such as high-performance ceramics (sintered zirconium oxide), press and metal ceramics.
The airaqua turbine features a spraying device to spray an air/water mixture onto the processing area.
Water cooling avoids overheating of the material.
The formation of microcracks is reduced considerably so that safe processing of materials is ensured.
The water spray traps the grinding particles, protects the grinding tools and thus extends their service life.
As an option, an adapter is available or using the turbine handpiece in milling units.

The spray can be switched on and off quickly with the switch on the handpiece. Fine adjustment is achieved with the two regulators in the table unit. A very small rotor allows extremely comfortable working and perfect view on the workpiece. The lubricant is directly fed into the bearings. The handpiece features a special adapter (midwest) and thus can be used with angle handpieces, turbines and air motors with the same standard.

Technical data:

Speed	300,000 rpm
Energy supply	compressed air
Operating pressure	2.8 – 3.2 bars
Air consumption	40 l/min.
Water reservoir	350 ml
Collet	1.6 mm
Lubrication	manual
Width	approx. 190 mm
Height	approx. 190 mm
Depth	approx. 125 mm

airaqua turbine
REF 110 0146 0

Scope of delivery:
Table unit with filter, controller, manometer, water reservoir and regulators, footswitch, handpiece with rotor, special oil 30 ml and adapter

Accessories:



Adapter for airaqua turbine
16 mm
REF 730 0018 4
18 mm (für BF1)
REF 730 0018 3
28,5 mm
REF 730 0018 5





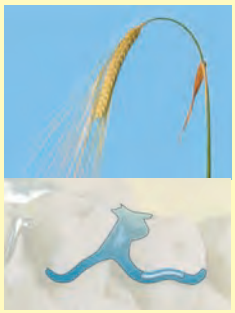
Refill package airaqua turbine oil
30 ml
REF 520 0033 5

Polierjet

Further development of an industrial polishing technique rationalizes dental surface processing.



Quadro-Finish



Compared to conventional polishing, the biocompatibility of chrome cobalt castings is increased due to a compacted surface:

- no mechanical irritation of the mucosa by sharp edges
- no mechanical irritation of the mucosa due to pores

Quadro-Finish polishing unit incl. starter kit
polishing material
4 polishing drums
REF 130 0046 0

Technical data	
Height	860 mm
Width	830 mm
Depth	600 mm
Motor power	0.75 KW
Current consumption	2.7 A /230 V
Weight	152 kg

- constant polishing performance
- no deformed chrome cobalt objects due to manual polishing
- improves and standardizes the precision of fit of chrome cobalt work
- time-consuming, unpleasant polishing with rubber polishers which is also injurious to health is no longer required
- less dirt and more pleasant working conditions in the laboratory
- surface hardening of non-precious alloys - clasps become clearly more elastic
- perfect polishing of the inside of the clasp

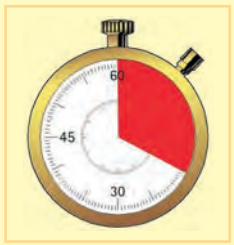


Duo-Finish

Due to the rolling effect of the polishing materials the structure of chrome cobalt claps is enhanced. A hard shell is formed on the outside and a soft core in the inside so that the clasps become more elastic and flexible similar to a cornstalk.

Duo-Finish polishing unit incl. starter kit
polishing material
2 polishing drums
REF 130 0045 0

Technical data	
Height	670 mm
Depth	755 mm
Width	600 mm
Motor power	0.75 KW
Current consumption	2.7 A /230 V
Weight	120 kg



Chrome cobalt supply, crowns and bridges made of non-precious alloys and titanium are polished to pre-high luster in three working steps. Compared to conventional polishing, approx. 20 minutes can be saved for each chrome cobalt object.

Accessories:

Foot rack
REF 730 0016 8

Polishing drum
REF 730 0016 7

Leasing at request

1. Prepolishing



Polishing porcelain 3/3, 8000 g
REF 730 0015 7

Polishing porcelain 6/12, 7200 g
REF 730 0015 8

Polishing porcelain 9/9, 7800 g
REF 730 0015 9

Polishing porcelain coarse, 5500 g
REF 730 0016 2

2. Main polishing



Polishing porcelain spheres, 9800 g
REF 730 0016 0

Polishing porcelain pins, 8800 g
REF 730 0016 1

Polishing powder, fine, 3500 g
REF 730 0016 3

3. High luster polishing

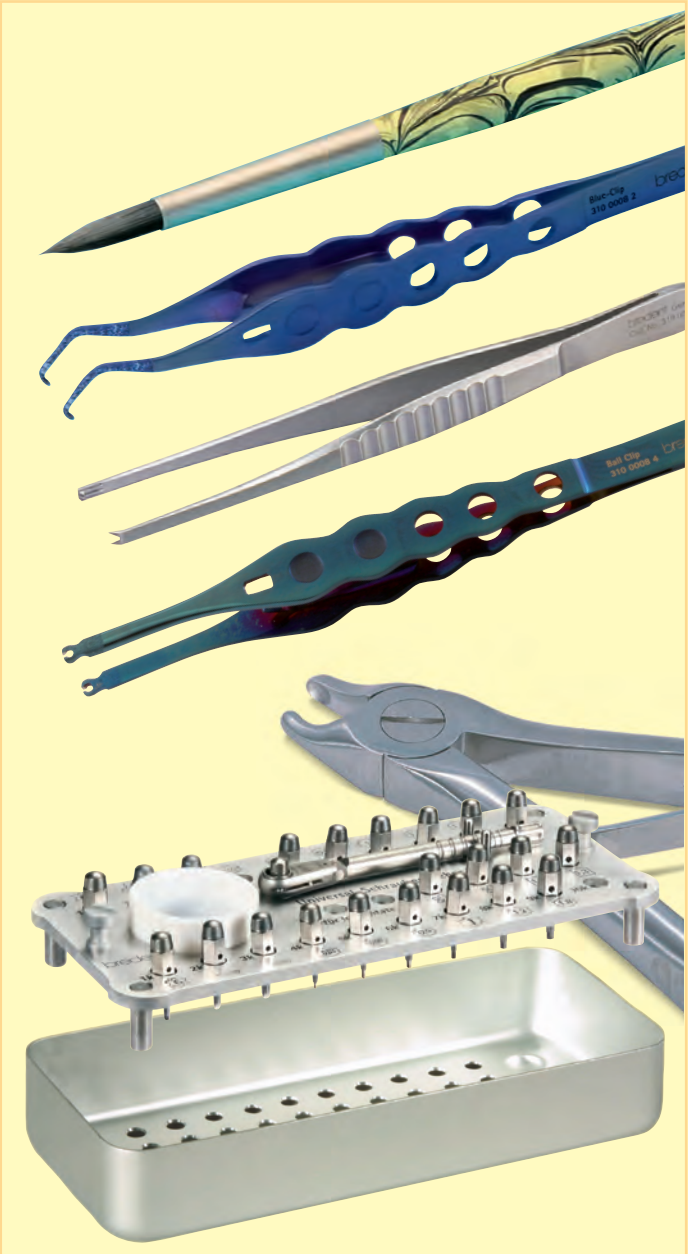


Polishing granulate, 4000 g
REF 730 0016 4

Polishing cream, 290 g
REF 730 0016 5

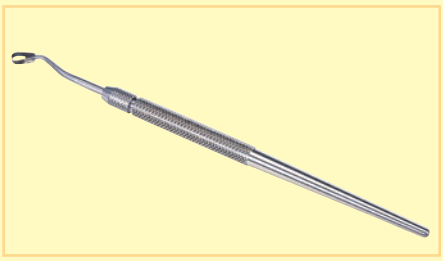
Polishing stainless steel pins, 2500 g
REF 730 0016 6

Innovative instruments simplify procedures during day-to-day work. In accordance with this principle, bredent develops sophisticated products that generate time-saving and cost-reducing workflows.



Abdruck-Cut 392
Cervical disc 392
Thermo-syringe 392
Piezo-Blitz pb1 393
Plaster knife 393
Ergonom wax knife 394
Quick-Mandrell-System 394
Quick Change 395
Spot Clip 396
Mamelon cutter 396
Quicktool 397
Ceramix 397
MagicContrast 398
MagicBrush 398
KoliBrush 400
Unique Brush 401
Blue-Clip 402
Ball-Clip 403
Repositioning tweezers 404
Activating pliers 405
Novo-Grip 405
Pollygrip 406
Transfuser 406
Wax adapter 407
Universal screwdriver set 408
Universal screwdriver set for contra-angles 409
Screwdriver 410

Abdruck-Cut



Abdruck-Cut
1 piece
REF 360 0114 0

Undercuts can be removed from the impression material with ease and in a targeted manner, using the loop blade that is as sharp as a scalpel.



The scalpel-sharp loop blade allows cutting even in areas difficult to access.

Accessories:



Loop knife
1 piece
REF 360 0115 0

Cervical disc

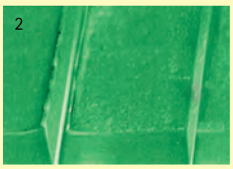


Increases precision and reduces working time when making wax or plastic patterns.

Cervical disc
REF 320 0091 0



This precision steel cutting disc is 0.1 mm thick, 3.0 mm in diameter and can be guided exactly when cutting.



Shows a comparison of the cuts made in 0.5 mm thick wax using a scalpel (left) and cervical disc (right).



Shows an extremely precise pattern, produced using our dipping wax without the need to re-wax the cervical margin.

Thermo-syringe



Fixing and glueing, that can be dissolved quickly without any residues, for any type of model situation.
The adhesive resin wax can be moulded by heating and easily placed on the models.

Thermo-syringe
REF 110 0121 1



After heating, the adhesive resin wax is directly applied onto the glueing point using the thermo-syringe. Firm bonding is ensured.



The adhesive resin wax can be applied onto any type of material. Afterwards it can be removed from the objects without leaving any residues.

Accessories:



Adhesive resin wax
Pack cont. 250 g **REF 510 0070 1**
Bucket cont. 1000 g **REF 510 0070 0**

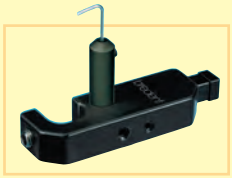
bredent group

Telephone (+49) 0 73 09 / 8 72-4 40

Piezo-Blitz pb 1



Piezo-electric ignitor for all gas burner types.
Suitable for all burner types (even old ones)!

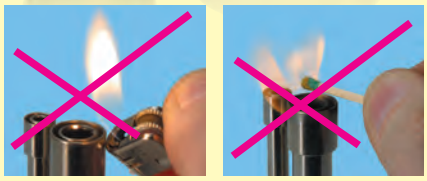


Piezo-Blitz pb1
REF 360 0126 6



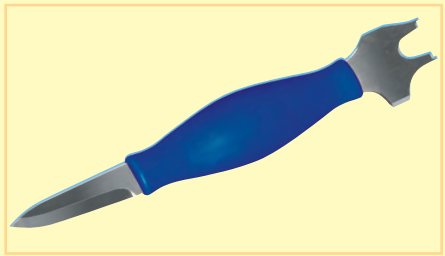
The main and the economy flame can be ignited by turning the ignition electrode.





... no more searching for a match or a lighter.

Plaster knife



Multi-purpose knife with ergonomically shaped plastic handle for optimum transfer of force, simplifies your daily work.

- Long blade made of stainless hardened steel.
- Dimensionally stable, easy-to-clean hard plastic handle. Ergonomic shape for right and left hand use.
- Multi-purpose element for easy removal of im pression tray. Features impact surface with opposing chisel.



The extra long and narrow blade is perfectly suited for cutting off excess plaster in the lingual region.



The special cones on the multi-purpose element simplify removal of the impression tray from the model.

Plaster knife
REF 310 0011 4



Plaster edges can be perfectly trimmed with the permanently sharp and stable blade.



When opening flasks, the lateral chisel ensures improved transmission of force thanks to the high leverage effect of the knife handle.



A separate impact surface has been added opposite the chisel to protect the back and the blade of the knife.

Ergonom wax knife



Modelling knife for dental prosthetics.
Various instruments all in one – hence instruments do not need to be changed any longer so that faster and more efficient processing of the wax model is possible.
Ergonomic design of handle - suitable for right- and left-hand users.

Ergonom
Wax knife
REF 310 0001 3



Special, ground edge of the knife tip for simple and fast modelling of age-specific papillae shapes.



The spoon which features a ground edge is perfectly suitable for modelling the alveolar area.



The deep spoon perfectly allows to apply large wax quantities within a very short time.



Well-aimed, fast application of wax reduces the time for remodelling in the interdental area.



Transitions towards the functional margin and the functional margin itself can be prepared swiftly and neatly thanks to the curved design of the spoon element.





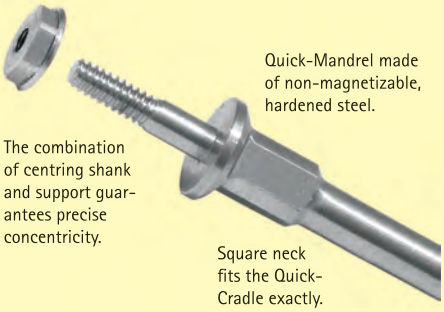
With the Ergonom wax knife, wax models can be easily and quickly shaped so that a natural appearance is obtained.

Quick-Mandrel-System



Save 40 seconds every time you change a separating disc, wheel or polishing disc. Every second counts!
The magnetic screwdriver holds the hexagonal nut.

Hexagonal nut with large support, made of magnetizable, hardened steel.

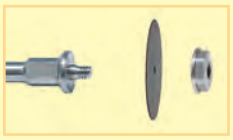


Quick-Mandrel made of non-magnetizable, hardened steel.

The combination of centring shank and support guarantees precise concentricity.

Square neck fits the Quick-Cradle exactly.

Stainless steel
Quick-Gradle
1 piece
REF 360 0115 5



size 1
up to 1 mm
thick discs
10 pieces
REF 360 0115 4



size 2
1-3 mm
thick discs
10 pieces
REF 360 0115 3



size 3
3-5 mm
thick discs
10 pieces
REF 360 0115 2

Assortment

1 Quick-Gradle
2 Quick-Mandrels size 1
2 Quick-Mandrels size 2
2 Quick-Mandrels size 3

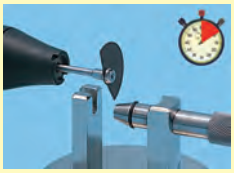
REF 360 0115 6

Save 40 seconds



now

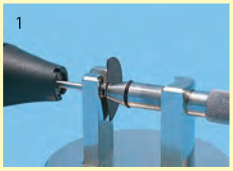
Changing the disc with pliers and an instrument wastes a lot of time!



in future

The Quick-Mandrel-System - Unbeatably fast and pratical.

Be faster and get ahead



Place the magnetic screwdriver on the Quick-Mandrel and turn it to loosen the hexagonal nut. The hexagonal nut is retained in the magnetic screwdriver.



Tighten the magnezitable hexagonal nut to position the new separating disc on the Quick-Mandrel, securely and in the centre.

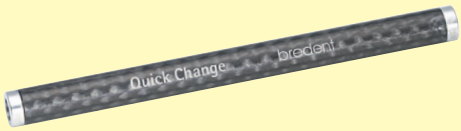
Quick Change



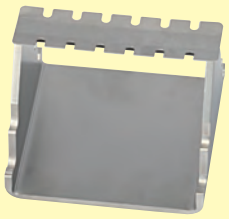
The combination of design, function and systematics.

Quick change system for instruments for ceramic, model fabrication and prosthetics

- Design carbon handle – esthetic and haptic
- Stainless blade holder with magnetic receptacle for perfect fixation of all blades
- All metal components and magnets are corrosion-resistant
- Temperature resistance of instruments inside the handle: 80°C
- Single hand use with quick change system
- Individual indications for ceramic, model fabrication and prosthetic
- Easy control thanks to reduced range of instruments
- Clever system allows to find the suitable instruments quickly (protection of registered design!)
- Troublesome screwing with keys is avoided
- Blades can be adjusted at any position – familiar working position is retained
- High safety thanks to immediate release of the heated blades
- Proper storage of sensitive ceramic blades
- Ceramic brushes can be perfectly stored in a hanging position
- Ceramic blades with high surface quality for outstanding gliding properties



Carbon handle
L 101 mm, Ø 8 mm
REF 310 0103 1

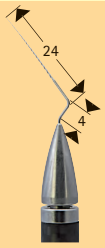


Halter
w 102 x d 100 x h 75 mm
Weight approx.. 575 g
REF 310 0103 0

Overview of instruments
Dimensions in mm



TwinPoint
REF 310 0105 6



Fissure tool
REF 310 0103 4



Olive
REF 310 0105 7



Croco, smooth
REF 310 0103 2



Croco, serrated
REF 310 0103 3



Adapter with M4 thread
REF 310 0103 5



MagicContrast size 6
REF 310 0105 3



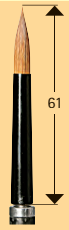
MagicContrast size 8
REF 310 0105 4



MagicContrast size 8B
REF 310 0105 5



KoliBrush size 6
REF 310 0104 4



KoliBrush size 8
REF 310 0104 5



KoliBrush size 8B
REF 310 0104 6



Blade according to Zahle
REF 310 0104 0



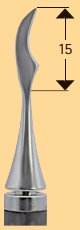
Probe 0.8
REF 310 0104 1



Probe 1.1
REF 310 0104 2

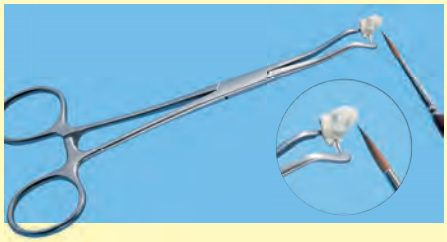


Blade 0308 Fig. 3
REF 310 0103 7

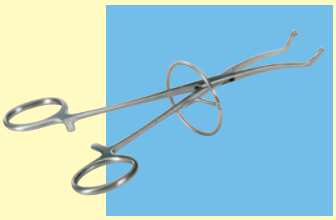


Blade 0408 Fig. 4
REF 310 0103 9

Spot Clip



Artery clip with spot-shaped holding area simplifies veneering – in two variations



Spot Clip
1 piece
REF 310 0000 5

Spot Clip with supporting ring
1 piece
REF 310 0000 7



Every ceramic specialist is familiar with the problems of metal-ceramic crowns without a metal margin: the holding spot of the artery clip is not sufficiently covered by base material (opaque). The problem can be solved with Spot Clip.



After removing the Spot Clip, the aqueous base material fills the holding spot of the clip. This way a uniform smooth layer of base material is obtained.



This clip covers only a tiny spot of the surface to be veneered. The base material can be easily applied around the holding spot of the clip.



Spot Clip simplifies the application of stains and glaze material. No smearing of stains, no subsequent application of stains in the area of the holding spot of the clip ist required.

Mamelon cutter



Simplifies the incisal design of ceramic crowns.

Mamelon cutter
1 piece
REF 310 0000 1





Large mamelon cutter for upper incisors.



Small mamelon cutter for lower incisors.



The crowns are shaped in the usual way using dentine material.



The incisal edge is cut back using the mamelon cutter.

The contoured dentine core after firing: A base for incisal design options is obtained in a fast, safe and easy way.

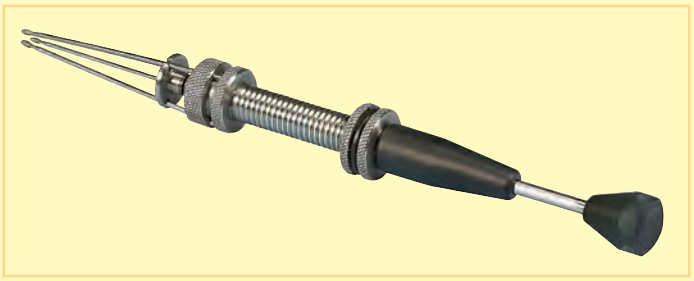


The individual shades can be applied onto the dentine core – regardless whether firing has been carried out or not.



The incisal edges of the finished crowns exhibit a vivid play of colours.

Quicktool



Ceramic structures are held safely without any pressure thanks to the three galvano plated diamond tips and the locking mechanism – even galvano formed copings.



Quicktool
REF 310 0102 0

The three bud-shaped diamond tips ensure safe and uniform hold of the crown. Accordingly, safe hold is achieved also when condensing.

Accessories:



3 diamond tips
REF 310 0102 1



The gripping force can be adjusted to the crown size without deforming the crown.

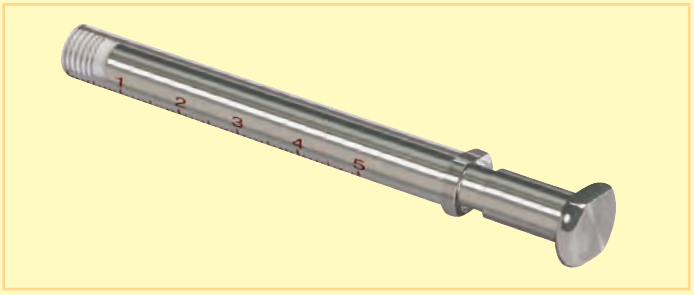


In case of limited space, a diamond tip can be removed - ideal for lower anterior crowns.



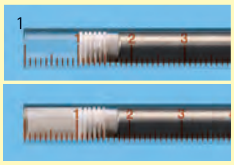
The integrated condenser condenses the ceramic material in next to no time.

Ceramix

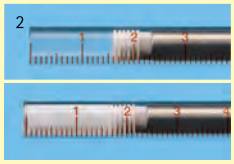


Reproducing individual shade mixtures quickly and easily. Ceramic material is saved thanks to controlled dosing.

Ceramix
REF 360 0119 5



The desired quantity is determined using the scale and the Ceramix is inserted into the ceramic material.



The corresponding filling quantity is determined for additional ceramic materials.



When inserting the Ceramix into the ceramic material, it must be ensured that the material is properly condensed.

To obtain the same shade mixture continuously, note down the ratio of the mixed shades. This way ceramic material is saved.



To obtain individual sample shade tabs, stir the mixed ceramic material thoroughly with a spatula. Take up with the Ceramix, press onto the fibrous pad, wet and fire.

MagicContrast



MagicContrast – black hair
Fatigue-free working thanks to perfect contrast between ceramic material and brush hair.

The synthetic hair provides lasting springiness.

The „transformers" among the brushes which obtain their original pointed shape after they have been washed out or by vibrating them lightly.



Product name	Size	Qty.	REF
MagicContrast	4, 6, 8	1 piece each	390 CSET 1
MagicContrast	1	2 pieces	390 C001 0
MagicContrast	2	2 pieces	390 C002 0
MagicContrast	4	2 pieces	390 C004 0
MagicContrast	6	1 piece	390 C006 0
MagicContrast	8	1 piece	390 C008 0
MagicContrastBigBrush	8 BigBrush	1 piece	390 C008 B
MagicContrast	1/0	2 pieces	390 CS01 0
MagicContrast-Opaker	5	2 pieces	390 CS03 0

Scale 1:1

MagicBrush



MagicBrush – golden brown hair

High springiness of durable synthetic hair for simpler layering of the ceramic material. MagicBrush and MagicContrast only differ by the color of the hair.

Restore the original pointed shape by tapping off or vibrating the brush lightly, just like with the MagicContrast brushes.



Product name	Size	Qty.	REF
MagicBrush	4,6,8	1 piece each	390 MSET 1
MagicPaintBrush	00 000	1 piece each	390 MS23 0
MagicBrush	1	2 pieces	390 M001 0
MagicBrush	2	2 pieces	390 M002 0
MagicBrush	4	2 pieces	390 M004 0
MagicBrush	6	1 piece	390 M006 0
MagicBrush	8	1 piece	390 M008 0
MagicBigBrush	8 BigBrush	1 piece	390 M008 B
MagicBrush	1/0	2 pieces	390 MS01 0
MagicBrush	2/0	2 pieces	390 MS02 0
MagicBrush-Opaker	5	2 pieces	390 MS03 0

Scale 1:1

Telephone (+49) 0 73 09 / 8 72-4 40

Magic...



The MagicContrast brushes = black and MagicBrush = brown feature absolutely identical functional chacteristics!

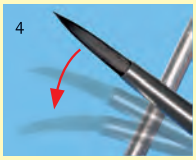


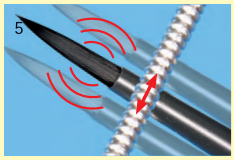
The pointed shape of dry brush hair is immediately restored by wetting, tapping off or vibrating the brush lightly.



Thanks to the strong contrast, any contamination such as dust or dry ceramic particles can be clearly recognized.







From the spatula shape to the original shape by rinsing the brush in liquid and then tapping if off or vibrating it lightly with a suitable instrument.



High elasticity to pick up specific quantities of ceramic material more easily.



The optimized springiness restores the shape of the brush tip immediately after picking up ceramic material. Additionally, the respective quantity can be easily assessed thanks to the contrast.



The spatula shape can be easily achieved after pressing the tip with two fingers. This way, the brush can be shaped individually.



Large quantities of ceramic material are picked up and time-saving layering is achieved thanks to the elasticity and the springiness of the brush hair.



The spatula shape does not reduce the stability of the brush hair; hence less time is required for applying the ceramic material to the framework.

KoliBrush



KoliBrush – golden brown natural hair
Natural hair brushes made of superior quality Kolinsky hair.



Improved design of the tip of the BigBrush is achieved tanks to the integrated spheres - for simpler modelling. Fine, stable tip thanks to carefully selected hair.



The shape and quality of the hair for perfect retention of moisture and improved adhesion and application of ceramic material.



The desired elasticity is obtained by the unique design and combination. This way already applied ceramic layers will not be damaged.

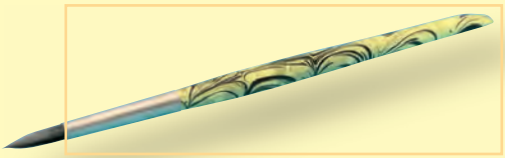
Scale 1:1

Product name	Size	Qty.	REF
KoliBrush	4, 6, 8 B	1 piece each	390 KSET 1
KoliBrush	1	2 pieces	390 K001 0
KoliBrush	2	2 pieces	390 K002 0
KoliBrush	4	2 pieces	390 K004 0
KoliBrush	6	1 piece	390 K006 0
KoliBrush	8	1 piece	390 K008 0
KoliBigBrush	8 BigBrush	1 piece	390 K008 B
KoliBrush	1/0	2 pieces	390 KS01 0
KoliOpakerBrush	5	2 pieces	390 KS03 0

bredent group

Telephone (+49) 0 73 09 / 8 72-4 40

Unique Brush



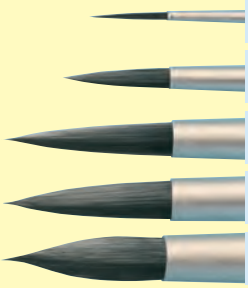
Ceramic processing „par excellence".
Unique Brush – the truly esthetic brush.

With newly developed matt black bristles and unique design of each brush – even more benefits when processing ceramic materials.

- Perfectly shaped brush tips enables accurate placement of the precious ceramic materials
- Superior retention of moisture for prolonged modelling
- High elasticity of the brush hair so that large quantities of ceramic material can be picked up
- Spatula function for layering small gaps
- Individual color of each brush renders the tool unique
- Ergonomic shape enables fatigue-free working

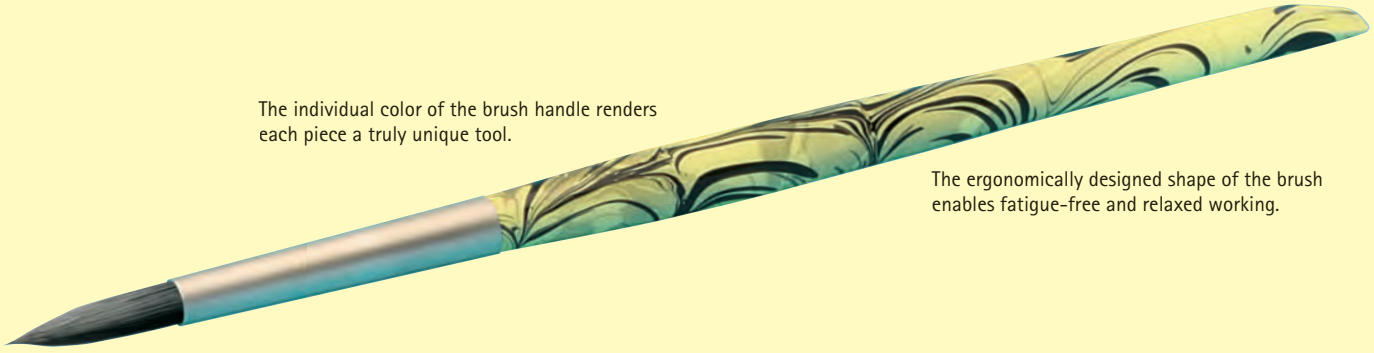
The brushes are available in the assortment (in an attractive case) or individually.

Scale 1:1



Product name	Size	VPE	REF
Unique Brush Set	1, 4, 6, 8	1 piece each	390 USET 1
Unique Brush	1	1 piece	390 U001 0
Unique Brush	4	1 piece	390 U004 0
Unique Brush	6	1 piece	390 U006 0
Unique Brush	8	1 piece	390 U008 0
Unique Brush	BigBrush	1 piece	390 U008 B

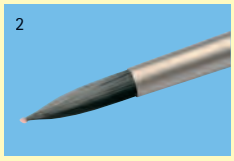
The individual color of the brush handle renders each piece a truly unique tool.



The ergonomically designed shape of the brush enables fatigue-free and relaxed working.



The newly developed, matt black brush hair with extremely high elasticity and excellent retention of the mixing liquid ensures prolonged modelling.



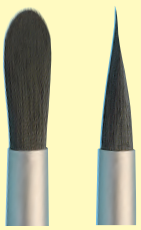
The application-oriented shape of the brush tip enables accurate placement of the precious ceramic material. The contrast between the brush hair and the ceramic material ensures simple determination of the quantity that has been taken up.



The optimized, high elasticity of the newly developed brush hair allows also to take up large quantities of ceramic materials.



The required new shape and function are easily achieved by pressing the brush tip together with the fingers.



The spatula shape allows to build up very small interdental spaces and to separate them. It renders the brush a perfect tool for the preparation of marginal ridges.



The spatula function of the brush allows to apply ceramic material very accurately and to smoothen large areas. As a result, time during finishing is saved after firing.



The perfectly shaped brush tip is restored by rinsing the tip with water and then tapping off or vibrating it gently with a suitable instrument.

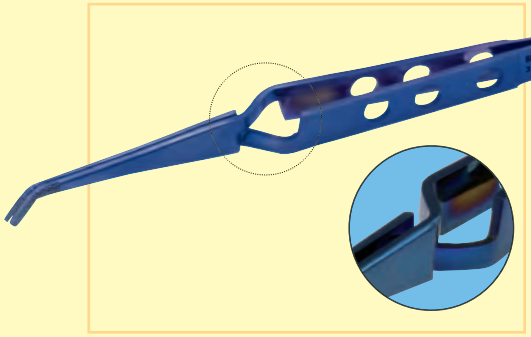
Blue-Clip

The three clips with diamond-coated working sections – suitable for numerous small items.

- **avoid time-consuming searching**
- **hold numerous small items safely**
- **functional design and appealing color**
- **three-point contact to hold spherical and cylindrical small items safely**
- **diamond-coated working section**
- **color contrast to items that have been taken up**
- **self-clamping or locking functions**
- **double function (spreading and clamping)**

Screws, nuts, attachment components, items in the latch technique and numerous others are becoming smaller and smaller and more and more delicate. To remove these items from the packaging, clips and tweezers without diamond-coating are being used today, which include the problem that these tools do not provide sufficient grip and the items to be gripped may slip off and fall down.

Blue-Clip – the highly special clips with two functional principles. Three different 2-point and 3-point tip shapes. All working sections are fully coated with a fine diamond grain, which ensures firm grip of all small items that can be taken up with Blue-Clip using the clamping or spreading function. To achieve enhanced contrast, all three clips were coated in blue using plasma coating. As a result, the position of shiny metal items can be perfectly recognized.



Blue-Clip „Shape 1"
Angled and diamond-coated tips (3-point) with cross-clamping function
REF 310 0008 1

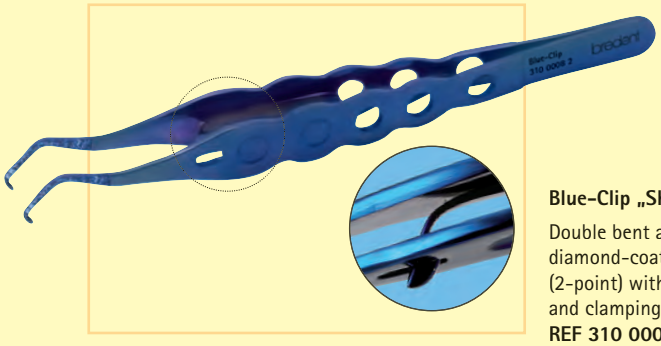




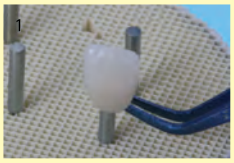


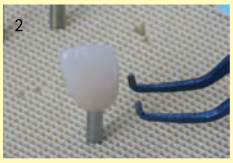


This type of tweezers allows to put down the clamped items and the clip after taking up the small items. The force of pretension has been matched with this type of handling.



Blue-Clip „Shape 2"
Double bent and diamond-coated tips (2-point) with spreading and clamping function
REF 310 0008 2

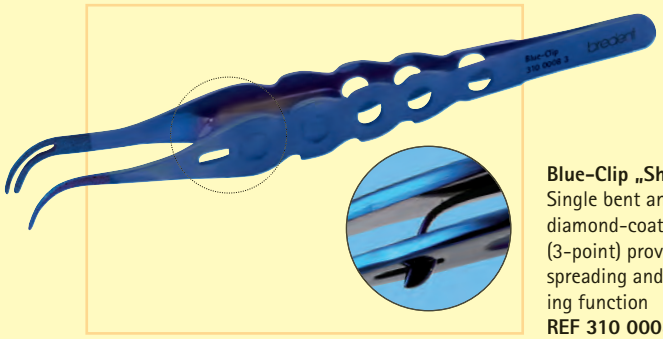








Very short and double bent tips. The spring force is sufficient for the spreading behavior to easily hold anterior teeth in the inner side. The clamping function of the clip also allows to take up small items.



Blue-Clip „Shape 3"
Single bent and diamond-coated tips (3-point) provide a spreading and clamping function
REF 310 0008 3









The spring force for the spreading behavior is sufficient to easily take up small bridges in the inner side. The clamping function of the clip also allows to take up small items. Spherical or cylindrical small items can be safely grasped with the three-point contact tips.

Types of function



Self-clamping „Shape 1"
thanks to cross-clamping



Locking function „Shapes 2 + 3"
Raster function with quickrelease lock. To reduce the stress on your fingers, the clamping lock of both clamps „Shape 2 + 3" snaps into place in the perfect position. When the working process is completed, the securing function can be deactivated by pressing the clip with the thumb; the object that has been clamped in before, can be removed again.

Ball Clip

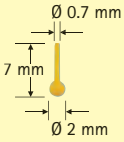


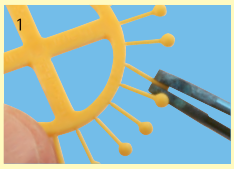
The holding system for crowns and bridges..
Simple and reliable fixation of crowns and bridges to be veneered with composite or ceramic. Easy-to-use locking function. No reworking or remakes of dropped crowns and bridges.

Additional applications
- Application of oaque
- Adding of ceramic
- Staining and glazing
- Sandblasting and steam cleaning
- Reliable hold while condensing
- Removal of the ceramic structure from the model
- Safe placement on the firing try
- Removal tool for frameworks and raw fired structures

Assortment
1 Ball Clip holding device (ca. 155 x 15 mm)
1 Ball Clip holding pins, ring with 25 pieces
REF 310 0008 4

100 Ball Clip holding pins 4 rings with 25 pieces each
REF 310 00H8 4





25 ball heads on each moulding...
Removing a ball head from the moulding...)









Firm grip of single crowns and bridges in all positions. Simple release of the clip function and avoidance of the risk of damage to the restoration caused by dropping.





Since the diamond-coated boring in the functional area has been matched with the diameters of the head shapes, perfectly safe hold of all single crowns and bridges is ensured. The sophisticated working area offers an almost unlimited number of different positions.





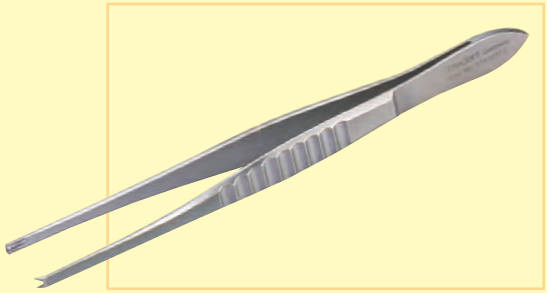


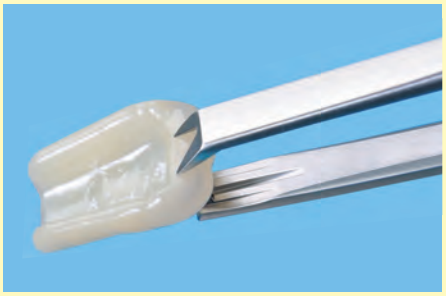






Repositioning tweezers





- special pincer tips for secure holding
- pincer tips of hardened material for a long working life
- no slipping of small parts – no irritating searching
- fine tips for narrow areas

Secure holding of plastic and ceramic teeth during repositioning in the cuvette and boiling-out. The special pincer tips of the tweezers take secure hold of teeth and other small parts and permit fast working.

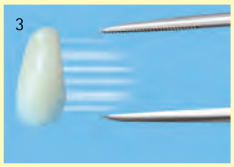
Repositioning tweezers
1 piece
REF 310 0011 5



The pointed pincer tips permit secure holding of teeth and other small parts.



The special and well designed denticulation of the pincers provides optimal hold security.



Secure holding of teeth is not possible with normal tweezers. Time-consuming searching is eliminated.

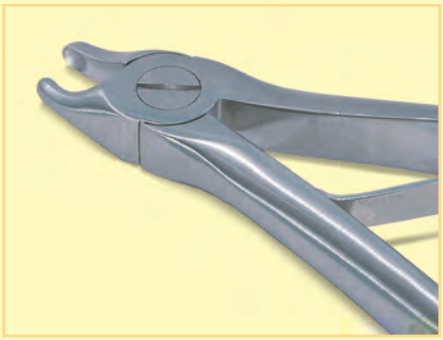


Small parts such as screws or attachments are gripped easily and securely. A useful instrument particularly for implantology.



On completion there is always a problem – the repositioning of the teeth! The special fine pincers at the tweezers tips permit secure gripping of the teeth.

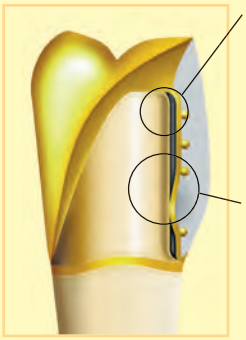
Activating pliers



Save telescopic units.

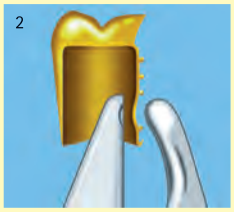
bredent
Activating pliers
REF 320 0043 0

Provide conical and telescopic crowns with "new" friction easily and quickly.



The problem:
Conical and telescopic crowns have lost their friction.

The solution:
Activating pliers - Pliers which recreate the retentive forces for telescopes which have lost their function.



The friction zones in the outer coping create 3 new contact areas between the inner and outer copings. This restores the retentive friction. Should the unit be activated too much, the surface can be trimmed to reduce the friction.

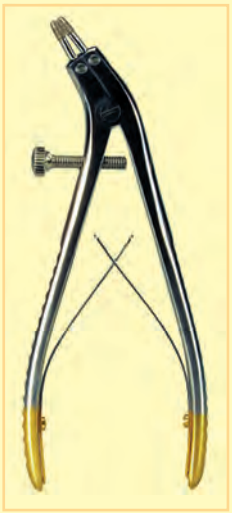


These pliers have a ball and socket for creating one or several new friction zones. The long lever of the pliers enables the forces to be applied as required.



The activating pliers can also be used to reduce a friction zone which is too retentive. If necessary, the facing should be removed for activating the unit and replaced again later.

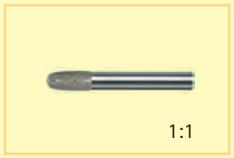
Novo-Grip



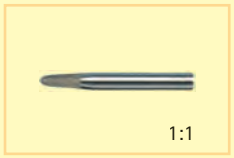
Sharpenable, sintered diamond coated inserts for conical pliers with „grip".

Novo-Grip pliers
1 pair of pliers
+ 2 standard inserts
+ 1 Allen key
REF 310 0000 8

Novo-Grip pliers
1 pair of pliers
+ 2 small inserts
+ 1 Allen key
REF 310 0011 3



Novo-Grip
standard insert
2 pieces
REF 310 0001 A



Novo-Grip
small insert
2 pieces
REF 310 0001 B

Accessories:



Diabolo cleaner
grindstone
for inserts
1 piece
REF 340 0100 0

Set screws M3
4 pieces
REF 310 0011 2

Different sizes



Exchangeable insert with a diameter of 2.35 mm, also for small primary crowns.

Special shafts



Hardened shafts provide high stability even if strong pressure is exerted.

Rotatable



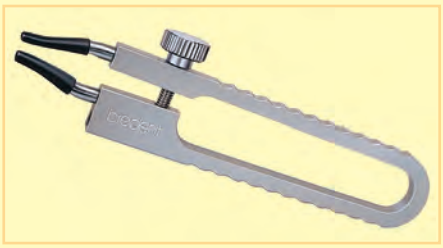
Worne inserts can be rotated. New diamond grains ensure that inner surfaces of crowns can be held safely again.

Sharpenable



To regain the maximum abrasiveness, the inserts are clamped into the handpiece and new diamond grains are obtained on the surface using the grindstone.

Pollygrip



Grips all crowns, bridges and inlays firmly for finishing and polishing precisely.

Crown holder, wide
1 piece **REF 360 0100 0**

Crown holder, narrow
1 piece **REF 360 0099 0**

Replacement parts:

Special rubber sleeves
100 pieces **REF 360 0096 0**

Assortment

23 pieces
1 Pollygrip
1 Crown holder, wide
1 Crown holder, narrow
20 Special rubber sleeves

REF 360 0095 0



The rubber sleeves can be exchanged and grip firmly during all procedures.



Even minute inlays can be held firmly and without causing harm.

Accessories:

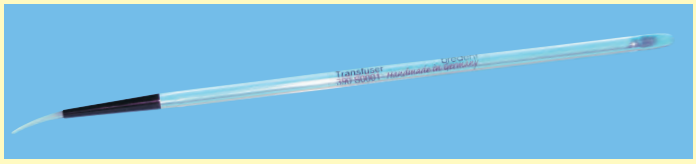


Crown holder, wide
1 piece
REF 360 0098 0



Crown holder, narrow
1 piece
REF 360 0097 0

Transfuser

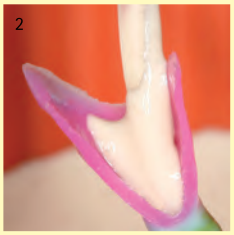


Transfuser
1 piece,
REF 390 S000 1
4 pieces,
REF 390 S000 4

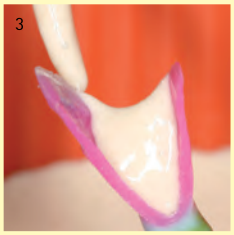
Gentle and safe transfer of investment compound and gypsum.
While investing and casting an impression, quite frequently air gets entrapped - especially in narrow and inverse areas - which may cause undesired bubble formation. So far it was merely possible to utilize instruments and brushes for the preparation. But sharp-edged instruments bear the risk of damaging both modellation and impression. While using brushes, it is possible to transfer excess fluids, and if the brush is rather dry it may withdraw some moisture. Both may affect the expansion behavior of investment compounds.
The curved and flexible silicone tip of the Transfuser allows a gentle, damage- and bubble-free application prior to standard filling procedures. The smooth and dense surface provides excellent gliding characteristics for gypsums and investment compounds, and thus a bubble-free material transfer.



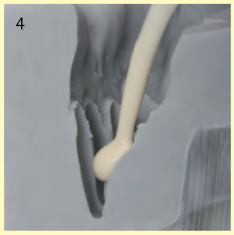
Highly flexible, soft tip and thus no risk of damaging the wax model.



Narrow areas are thoroughly filled by gentle application without modellation damage.



Optimal material flow and bubble-free condensation with the Transfuser.



Smooth and gentle filling of extreme hollows with gypsum in case of silicone impressions.



No risk of damage during the filling process.



Each area is well accessible and allows for optimal and bubble-free material distribution.

bredent group

Telephone (+49) 0 73 09 / 8 72-4 40

Wax adapter



Quick and safe adapting of prefabricated wax patterns in the CoCr technique.

Wax adapter
REF 360 0120 5

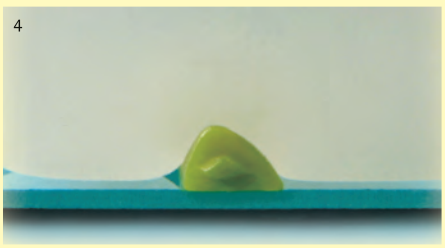


With the flat side, clasps and sublingual clasps can be perfectly and correctly placed on the investment model and pressed against it.





When using the wax adapter, prefabricated wax patterns will no longer be damaged or deformed by the special silicone but safely attached to the model.





The rounded side is perfectly suited for stippled maxillary plates or retentions. The fine wax patterns will not be deformed either.



Universal screwdriver set



Sterilizable set

Screwdriver set for 98% of all screws available on the market. To be inserted into the torque ratchet, adjustable from 10 to 40 Ncm. This way screws can be turned in correctly and safely.



Universal screwdriver set to loosen and tighten all types of screwed implant abutments.

Universal screwdriver set with instruments
REF 310 0001 2

Universal screwdriver set, without instruments
REF 310 0001 1





On the lid you can find important information required for the quick selection of the necessary screwdriver and the torque needed to tighten the screw.



Torque ratchet
REF 330 0115 5

Torque adjustable from 10 to 40 Ncm.



Screwdriver long

6	Screwdriver	1	Torx 6	**REF 310 0010 1**
	Screwdriver	2	slotted 1.6	**REF 310 0010 2**
	Screwdriver	3	slotted 2	**REF 310 0010 3**
	Screwdriver	4	0.03" only available as short type	
0.05"	Screwdriver	5	Allen 0.05"	**REF 310 0010 5**
0.9	Screwdriver	6	Allen 0.9	**REF 310 0010 6**
1	Screwdriver	7	Allen 1.0	**REF 310 0010 7**
1.2	Screwdriver	8	Allen 1.2	**REF 310 0010 8**
1.8	Screwdriver	9	Allen 1.8	**REF 310 0010 9**
2.5	Screwdriver	10	Hexagon 2.5	**REF 310 0011 0**
1.3	Screwdriver	11	Square 1.3	**REF 310 0101 1**
5.5	Screwdriver	12	Torx 5.5	**REF 310 0101 2**



Screwdriver short

6	Screwdriver	1	short	Torx 6	**REF 310 00K0 1**
	Screwdriver	2	short	slotted 1.6	**REF 310 00K0 2**
	Screwdriver	3	short	slotted 2	**REF 310 00K0 3**
0.03"	Screwdriver	4	short	Allen 0.03"	**REF 310 00K0 4**
0.05"	Screwdriver	5	short	Allen 0.05"	**REF 310 00K0 5**
0.9	Screwdriver	6	short	Allen 0.9	**REF 310 00K0 6**
1	Screwdriver	7	short	Allen 1.0	**REF 310 00K0 7**
1.2	Screwdriver	8	short	Allen 1.2	**REF 310 00K0 8**
1.8	Screwdriver	9	short	Allen 1.8	**REF 310 00K0 9**
	Screwdriver	10		Allen 2.5 only available as long type	
1.3	Screwdriver	11	short	Square 1.3	**REF 310 00K1 1**
5.5	Screwdriver	12	short	Torx 5.5	**REF 310 00K1 2**

Universal screwdriver set for contra-angles



Sterilizable set

Screwdrivers with seating for contra-angles. Thanks to the integrated torque they simplify turning in screws with special motors. In conjunction with the adapter, the screwdrivers can also be used with the torque ratchet.



Universal Screwdriver-Set for contra-angles, with instruments REF 310 W001 2

Universal Screwdriver-Set for contra-angles, without instruments REF 310 W001 1



Accessories:



Torque ratchet REF 330 0115 5

Torque adjustable from 10 to 40 Ncm.

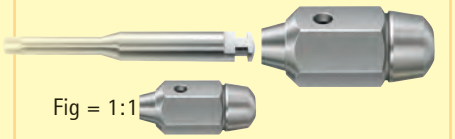


Fig = 1:1

Ratchet adapter REF 580 0116 8



Screwdriver long

6	Screwdriver	1	Torx 6	**REF 310 W010 1**
	Screwdriver	2	slotted 1.6	**REF 310 W010 2**
	Screwdriver	3	slotted 2	**REF 310 W010 3**
	Screwdriver	4	0.03" only available as short type	
0.05"	Screwdriver	5	Allen 0.05"	**REF 310 W010 5**
0.9	Screwdriver	6	Allen 0.9	**REF 310 W010 6**
1	Screwdriver	7	Allen 1.0	**REF 310 W010 7**
1.2	Screwdriver	8	Allen 1.2	**REF 310 W010 8**
1.8	Screwdriver	9	Allen 1.8	**REF 310 W010 9**
2.5	Screwdriver	10	Hexagon 2.5	**REF 310 W011 0**
1.3	Screwdriver	11	Square 1.3	**REF 310 W101 1**
5.5	Screwdriver	12	Torx 5.5	**REF 310 W101 2**



Screwdriver short

6	Screwdriver	1	short	Torx 6	**REF 310 W0K0 1**
	Screwdriver	2	short	slotted 1.6	**REF 310 W0K0 2**
	Screwdriver	3	short	slotted 2	**REF 310 W0K0 3**
0.03"	Screwdriver	4	short	Allen 0.03"	**REF 310 W0K0 4**
0.05"	Screwdriver	5	short	Allen 0.05"	**REF 310 W0K0 5**
0.9	Screwdriver	6	short	Allen 0.9	**REF 310 W0K0 6**
1	Screwdriver	7	short	Allen 1.0	**REF 310 W0K0 7**
1.2	Screwdriver	8	short	Allen 1.2	**REF 310 W0K0 8**
1.8	Screwdriver	9	short	Allen 1.8	**REF 310 W0K0 9**
	Screwdriver	10		Allen 2.5 only available as long type	
1.3	Screwdriver	11	short	Square 1.3	**REF 310 W0K1 1**
5.5	Screwdriver	12	short	Torx 5.5	**REF 310 W0K1 2**

Screwdriver long



Screwdriver long
1 piece
REF 330 0081 2

The long screwdriver allows perfect visual control of the horizontal path of screwing in the laboratory. The screw connection can be more easily achieved by the dentist. For screws with 0.9 mm hexagon socket.

Screwdriver short



Screwdriver short
1 piece
REF 330 0069 0

Ideal for practice and laboratory. The grooved handle simplifies turning in of screws since safe hold is ensured. For screws with 0.9 mm hexagon socket.

Screwdriver for contra-angles



Screwdriver for contra-angles
1 piece
REF 330 0081 3

For mechanical turning in of screws with 0.9 mm hexagon socket. The use of special motors allows to control the torque.

Screwdriver-Set



Assortment

3 pieces
1 x Screwdriver long
1 x Screwdriver short
1 x Screwdriver for contra-angles
REF 330 0081 0

Screwdriver is



Screwdriver is
for contra-angles
1 piece
REF 460 0001 0



Screwdriver is
manual short
1 piece
REF 460 0001 1

Special screwdrivers for the vks-oc rs abutments. Suitable as manual screwdriver and for contra-angles for enhanced control of the torque with special motors.

Screwdriver for stud-head screw



Screwdriver for stud-head screw
1 piece
REF 330 0116 4

Screwdriver for the stud-head screw vks-oc/sg 1.7 exchangeable stud.

Only selected, high-quality raw materials are used for the manufacture of burs. This selection makes it possible to create first-class burs for surface processing of the most varied materials.







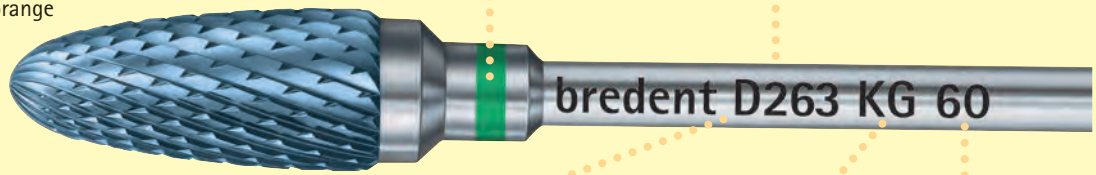
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The bredent Order Number System for Diatit and tungsten carbide tools

Color coding
Finding the cut type quickly with the help of the color code on the shaft of the bur.

NF	none	**KF**	red	**KS**	black
NH	orange	**KM**	blue	**GG**	none
MH	orange	**QM**	light-blue	**KC**	purple
N/MH	orange/blue	**QG**	white	**KT**	silver grey
GH	orange/green	**KG**	green	**M**	gold
SH	orange				

Tool shape, ISO-Number
Three numbers indicate the tool shape according to ISO.



Letter in initial position
N = special tool for non-precious metal alloys
H = Tungsten carbide
D = Diatit wear protection[1]
B = special tools (drills), e.g. fissure tool
F = special tools for the milling technique
S = silicone bur

[1] For details on the Diatit wear protection see page 329

Cut
bredent offers the tools mentioned above in 14 different cut designs. The cut types are marked by the combination of two capital letters.

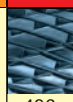
For details on the cut designs see page 325

Size
Diameter at the largest point of the working element in tenth of millimeters.

Finding the desired tool quickly

This catalogue offers the possibility to always find the desired tools in the fastest possible way.
The method of determination is either based on the shape or on the cut of the tool.

Determination based on the shape
The outer two columns of the double page 326/327 show all bredent tool shapes.
The desired shape can be selected there. Then a bredent cut type is selected in the row of the desired tool shape.
A page number is indicated in the box of the selected cut. Further information on the selected tool is provided on this page.

Picture Scale 1:1	REF	Cut													
		NF	NH	MH	GH	SH	KF	KM	QM	QG	KG	KS	GG	KC	KT
	D137. . 23 H137. . 23						 426	 429	 432		 434				

Picture of the tool in the original size.

Here are the two identifying letters of the desired cut type.

Order number, without the indication of the cut. This is available with a diameter of 2.3 mm.

This tool is available in the cut types KF, KM, QM, KG. For more detailed information see pages 426, 429, 432, 434.

To allow finding the different burs quickly the color codes have been indicated here.

Orientation based on the cut
From page 328 all tools are arranged according to the cut.
The arrangement includes fine and coarse cuts as well as special cuts for chrome-cobalt alloys titanium.

ISO numbers
are indicated for all tools to ensure enhanced comparability.
These internationally standardized numbers feature 15 digits.
The numbers include the following information:

1. - 3. digit: Materials of the working element
4. - 6. digit: Shaft type
7. - 9. digit: Shape of the working element
10. - 12. digit: Cut
13. - 15. digit: Diameter of the working element

509 104 001215 023

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The Cut Types of the bredent Diatit and tungsten carbide tools



NF:
Normal cut
Fine

- for processing of any dental material
- easy removal of material with perfect control, smooth surface of object
- single cut instead of "double" cross cut



NH:
Normal cut
with relief

- for processing of precious metals, non-precious metals, resin, plaster
- excellent removal of material and very smooth rotation, smooth surface of object
- relief: wide, stable cutting edge, extended service life



MH:
Central cut
with relief

- for processing of precious metals, non-precious metals, resin and ceramics
- fine removal of material, very smooth surface of object, low vibration running protects the wrist of the technician and the drive
- relief: wider, stabler cutting edge for extended service life, enhanced cutting performance



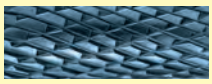
GH:
Coarse cut
with relief

- for coarse treatment of precious metals, non-precious metals, resins; in individual cases also for treatment of plaster
- excellent removal of material, low-vibration running and extended service life due to relief



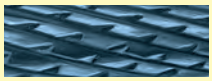
SH:
Super coarse cut
with relief

- for processing of plaster and carrying out particulary coarse work on resin surfaces
- excellent removal of material and particularly smooth material surface due to relief
- no loading with shavings due to larger cut spaces



KF:
Cross cut
Fine

- mainly for more delicate types of work on precious and non-precious metals, resins and ceramics
- moderate and accurate removal of material, smooth surface of object



KM:
Cross cut
Medium

- for finishing of larger surfaces on precious metals, non-precious metals and resins, in individual cases also on plaster
- efficient removal of material, smooth surface of object, smooth running of tool
- universal application possibilities, therefore reduced frequency of tool exchange



QM:
Horizontal cut
Medium

- suitable for finishing of larger surfaces as well as for more delicate work on precious and non-precious metals and resin, therefore reduced frequency of tool exchange
- very fine, economic removal of material, smooth surface
- high smoothness of running protects drive and wrist



QG:
Cross cut
Coarse

- especially for processing of silicones
- very efficient and accurate removal of soft materials



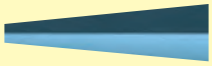
KG:
Cross cut
Coarse

- for coarse and efficient pretreatment of large surfaces on precious metals, non-precious metals and resins, in individual cases also on plaster
- extensive removal of material, larger surface roughness than the finer bredent cut types



KS:
Cross cut
Super coarse

- especially for processing of plaster, also suitable for very coarse types of work on resin
- extensive removal of material
- the size of the individual cut space avoids loading with shavings



GG:
Straight cut
Coarse

- to perform cuts in resin or shellack plates
- very economic cutting of plates
- single, straight cutting edges



KC:
Cross cut
Chrome-Cobalt

- especially for processing of chrome-cobalt alloys
- excellent removal of material, smooth surface
- the characteristic feature of this tool: the resulting metal swarf cause fewer irritations to the skin since they are larger and exhibit a coarse structure



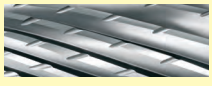
KT:
Cross cut
Titanium

- especially for processing of titanium
- the special dent of this cut increases the cutting volume which reduces the friction. Overheating of titanium is avoided.
- economic, careful removal of material, smooth surface



M7:
Super coarse serration

- offers multiple applications
- for plaster, plastic and high-end thermoplastic
- quick removal for efficient working



M5:
Coarse serration

- creates smooth surfaces and reduces the amount of work required
- for precious, non-precious metals, plastics



M3:
Medium serration

- for time-saving surface processing
- good material removal with very smooth surfaces
- for all materials



M1:
Fine serration

- fine serration creates very smooth surfaces and makes polishing easier
- Long service life for cost-effective working

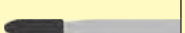
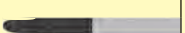
Pictures on scale 1: 5

Cut overview

Picture Scale 1:1	REF	Cut												
		NF	NH	MH	GH	SH	KF	KM	QM	QG	KG	KS	GG	KC	KT
Size 06	**B153 . . 02-06** only available in tungsten carbide	418													
Size 23	**H001 NH 04-31** only available in tungsten carbide		423												
	D001 . . 14 only available in Diatit														438
	D001 . . 23 **H001 . . 23** **H010 . . 08-16**			420				429			434				438
Size 16	**H010 . . 08-16**		423												
	D137 . . 23 **H137 . . 23**						426	429	432		432				
	D141 . . 23 **H141 . . 23** **N141 . . 23**			420+424				429							
	H161. . 60									423					
	D184 . . 16 **H184 . . 16**			420			426	429							
	D187 . . 23 **H187 . . 23** **S187 . . 23**						426	430		433	434				
	D194 . . 23 **H194 . . 23**						426	430			434				438
	D194 . . 40 **H194 . . 40** **N194 . . 40**				421+425	422	426	430			434			437	438
	D194 . . 50 **H194 . . 50**				421		426	430			434				438
	D194 . . 60 **H194 . . 60**					422						436			
	D194 . . 70 **H194 . . 70**					422						436			
	D198 . . 23 **H198 . . 23** **N198 . . 23**			424			427	430							438

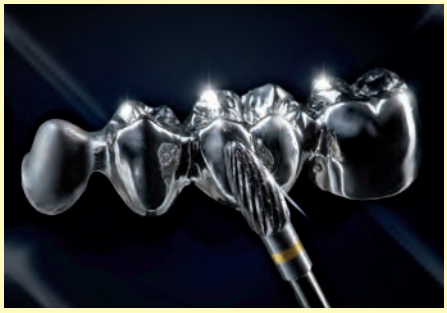
All tools that are shown are available with the shaft diameter of 2.35 mm. The total lengths of the tools are 45 mm (tools of sizes 02 - 23) resp. 52 mm (tools of sizes 40 - 70).

bredent group

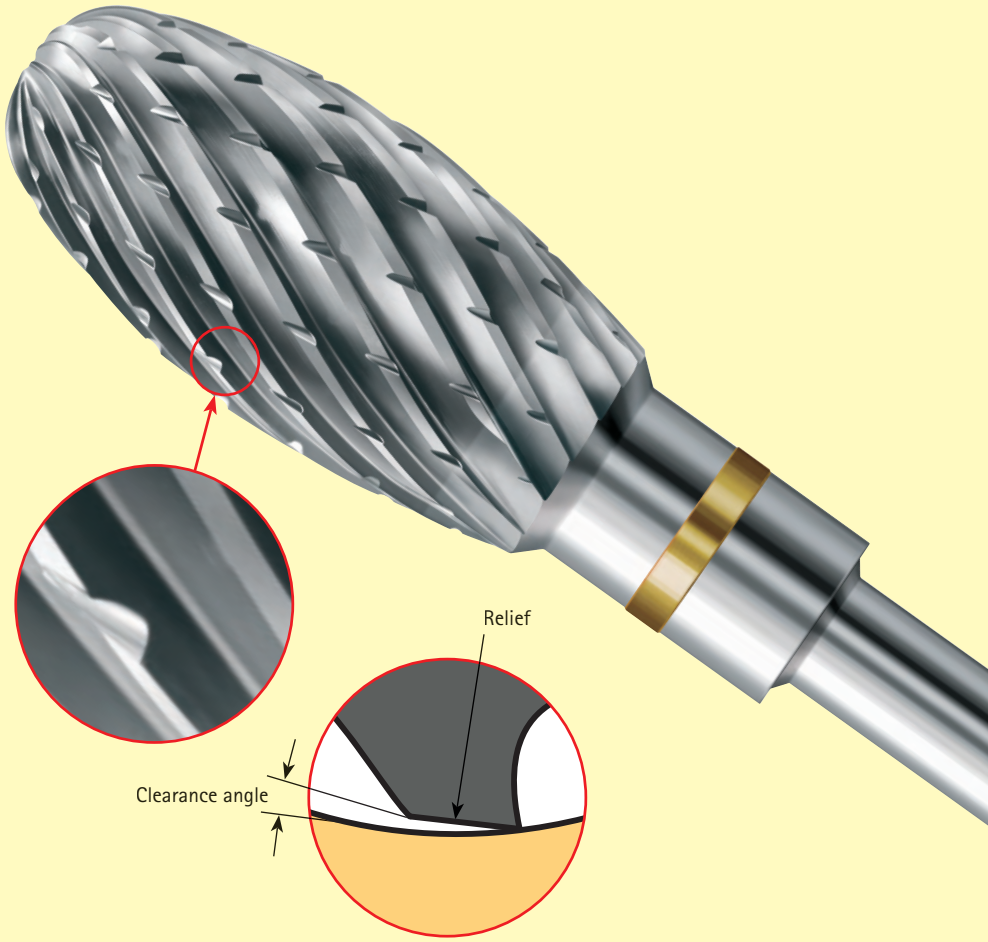
Picture Scale 1:1	REF	Cut												
		NF	NH	MH	GH	SH	KF	KM	QM	QG	KG	KS	GG	KC	KT
	D200 . . 23 H200 . . 23						427	430			435				
	D225 . . 23 H225 . . 23						427	430							
	D237 . . 23 H237 . . 23			420			427	431							
	D237 . . 65 H237 . . 65 S237 . . 65									433	435				
	H244 . . 23				421										
	D251 . . 60 only available in Diatit													437	
 Size 16	D257 . . 16/23 H257 . . 16/23							431							
	H263 . . 30 D263 . . 40 H263 . . 40 N263 . . 40				421		428	431							438
	D263 . . 60 H263 . . 60 S263 . . 60 N263 . . 60				421+425	422				433	435				
	D274 . . 60 H274 . . 40/60 N274 . . 40				421+425	422					435				
	D277 . . 14 H277 . . 14 N277 . . 14			420+424				421							
	D277 . . 23 H277 . . 23			420+424				421							
	D289 . . 23 H289 . . 23			421			428	432							
	D292 . . 23 H292 . . 23						428	432			435			437	
 Size 23	D468 . . 16/23 H468 . . 16/23												436		

All tools that are shown are available with the shaft diameter of 2.35 mm. The total lengths of the tools are 45 mm (tools of sizes 02 - 23) resp. 52 mm (tools of sizes 40 - 70).

„Generation M“ relief burs



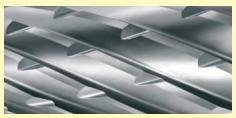
Relief burs with new multifunctional cut.
Thanks to a significant clearance angle, the „Generation M“ relief burs provide extended service life and reduce the number of repurchases. Adequate support of the cutting edges avoids chipping and leads to improved cutting performance. A smooth surface of the object to be processed is obtained and subsequent timeconsuming polishing work is reduced.
Thanks to the optimized geometry, chips can not penetrate into the skin when processing metals. This way the dental technician‘s health is protected.



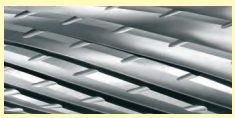
High-quality materials offer reliability.
Only specially selected, high-quality raw materials are used for the production of burs to obtain top-class tools and enable surface processing of various materials.
Quality-oriented production of the elaborately ground tools results in excellent ease of use. In combination with the relief cut technology, the exact concentricity avoids chipping of the cutting edges and protects the drive of the micromotor to enable perfect and efficient processing of high-quality dental restorations.

Generation M – the progressive bur concept
- suitable for soft and hard materials; efficiency is increased
- reduces the number of burs and facilitates organisation and control of the workplace
- considerably extended service life thanks to multifunctional cut
- reduction of the amount of work thanks to smooth surfaces

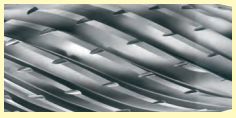
A new level of surface treatment is achieved by the change of the clearance angle and the proven support of the cutting edges of the new „Generation M“ bur concept. The variety of materials to be processed in the laboratory requires a number of different processing tools, which is minimized by the „Generation M“ burs and their range of applications. As a result, the efficiency during processing is increased and the number of tools to be used is reduced!



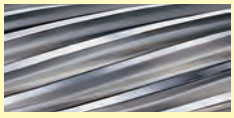
M7
The super coarse cut is suitable for various applications on plaster, denture acrylics and thermoplastic resins.Also suitable for fast removal of material on NPM alloys.



M5
The coarse cut produces a smooth surface and enables extensive removal of material on precious metals, NPM alloys and acrylics. The special clearance angle extends the service life of the bur.



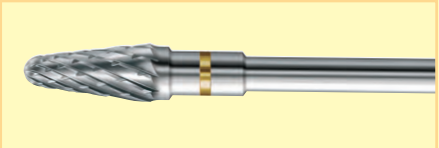
M3
The medium cut produces a very smooth surface and hence reduces the amount of work during subsequent surface treatment. Processing in areas difficult to access is facilitated.



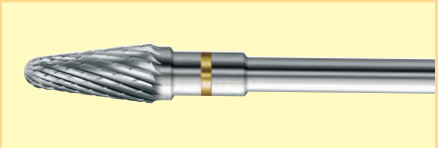
M1
The fine cut produces a very smooth surface and facilitates polishing. The relief cut extends the service life of the tool, which can be used over a longer period.

bredent group

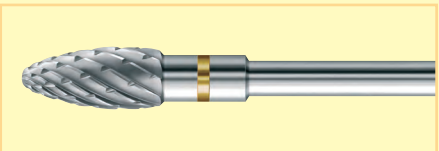
„Generation M“ relief burs



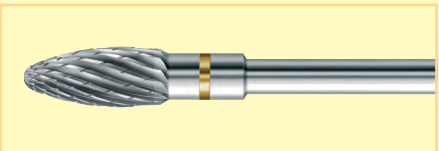
REF H263 M7 40
ISO-No.
500 104 263220 040



REF H263 M5 40
ISO-No.
500 104 263220 040



REF H274 M7 40
ISO-No.
500 104 274220 040



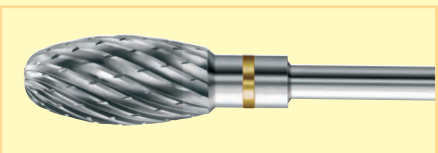
REF H274 M5 40
ISO-No.
500 104 274220 040



H274 M7 16
ISO-No.
500 104 274220 016



H274 M5 16
ISO-No.
500 104 274220 016



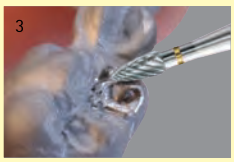
H277 M3 60
ISO-No.
500 104 277190 060



H263 **M7** 40
H263 **M5** 40
The proven, universal design with a wide indication range for metals and resins/acrylics.



H274 **M7** 40
H274 **M5** 40
Fast removal of material enables efficient working. The tapering tip allows perfect finishing even in areas difficult to access.



H274 **M7** 16
H274 **M5** 16
Surface finishing is completed with the small flame to obtain a very smooth surface.



H277 **M3** 60
Time-saving processing is guaranteed by the combination of smooth surface and fast finishing with the medium cut bur.

Accessories:



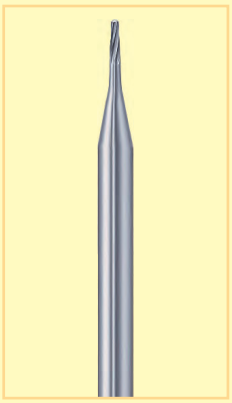
For perfect high gloss
The proven polishing paste filled with natural diamonds produces perfect high gloss in no time. The ideal complement to the „Generation M“.

***Zi*-polish**
Pre- and high gloss polishing paste
5 g
REF 360 1002 5



Rodeo round brushes
15 pieces
Ø 18 mm
REF 350 0096 0

Fissure tool



	Material	Tungsten carbide	QTY
	**REF**	**B153 NF 02**	10 pieces
	ISO-No.	500 104 153006 002	
	Ø 0,2 mm		
	**REF**	**B153 NF 04**	10 pieces
	ISO-No.	500 104 153006 004	
	Ø 0,4 mm		
	**REF**	**B153 NF 06**	10 pieces
	ISO-No.	500 104 153006 006	
	Ø 0,6 mm		



Due to the shape of the tool smoothening of cusp „slopes" at inaccessible spots is possible. The extremely small diameter allows excellent smoothening in the deep area of the fissure so that polishing of occlusal surfaces is simplified. Well polished occlusal surfaces reduce the accumulation of plaque. This tool offers the dental technician excellent design possibilities.

Assortment

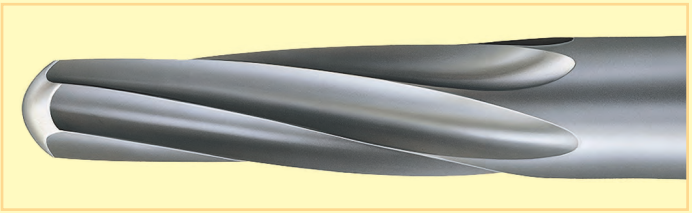
6 pieces, 2 pieces each
Fissure tool
ISO-No. 500 104 153006 002
ISO-No. 500 104 153006 004
ISO-No. 500 104 153006 006
REF 330 0082 6



Perfect fissures with the smallest fissure tool in the world
Diameter 0.2 mm



Additionally, the special cutting edge geometry allows recontouring of ceramic occlusal surfaces prior to glaze firing. Therefore it offers new possibilities of designing occlusal surfaces to the ceramic specialist.

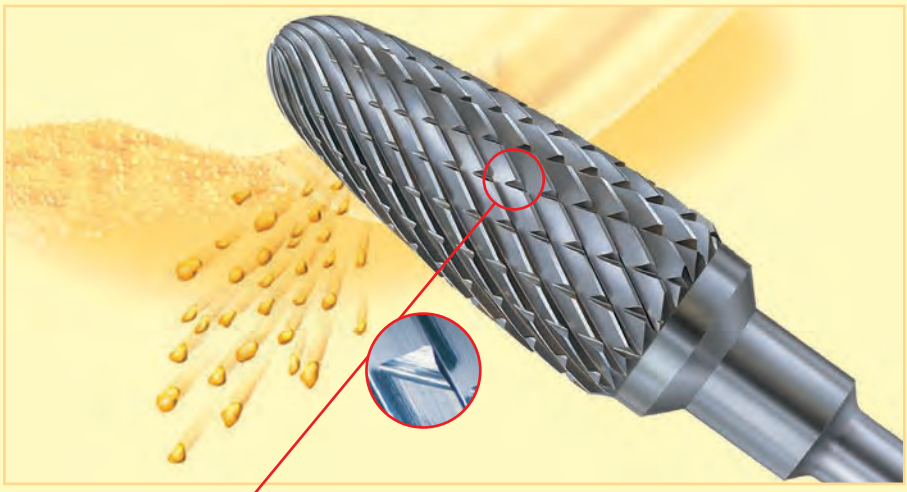


The bredent fissure tool in a magnification x 100

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm			10-20,000	10-20,000	15-20,000	15-20,000

bredent group
Telephone (+49) 0 73 09 / 8 72-4 40

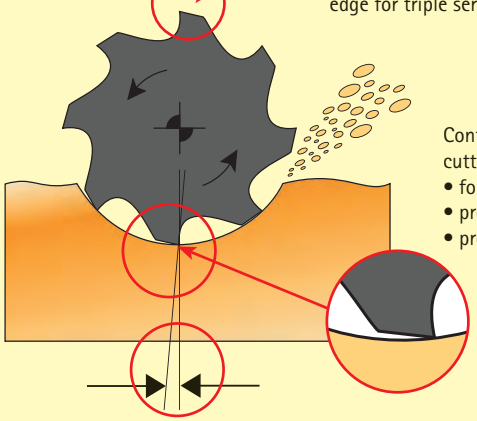
Comparison: bredent tools with and without relief



Triple service life comparated to conventional bredent cut.
The latest tungsten carbide tools by bredent are provided with a relief during an additional manufacturing process. The relief supports the sharp cutting edge to avoid breakage of the edges. This way the service life of the relief tools is three times longer than the one of conventional tools. Additionally, the relief allows to optimize the machining angle so that an excellent cutting performance is achieved.

bredent tool with relief

Cutting edge with relief: wide support of the cutting edge for triple service life



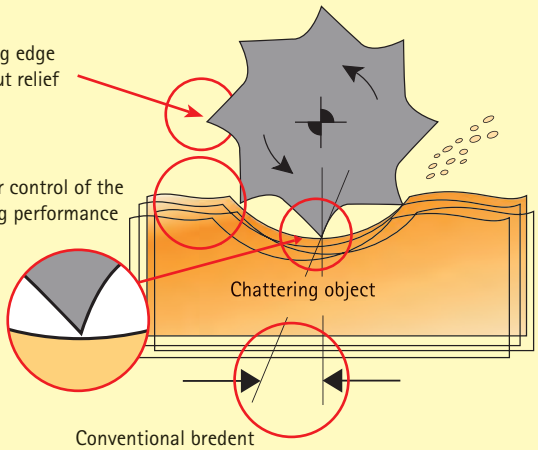
Controlled penetrating of the cutting edge into material
- for chatter-free working
- produces smooth surfaces
- protect the wrist

Optimized machining angle for enhanced cutting performance

For comparison: a conventional bredent tool

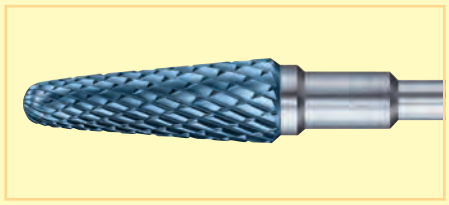
Cutting edge without relief

Harder control of the cutting performance



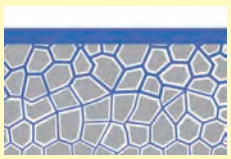
Conventional bredent machining angle

Diatit wear protection

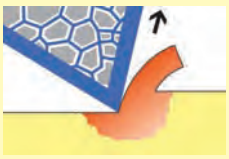


Smooth running from the very beginning
Diatit tools feature particular wear protection: Diatit. This is a special material which is added into the surface of the bur after it has been produced. It hardens the tool surface and reduces the surface friction. This comprehensive hardening process results in a tool which features very smooth rotation and precise cutting performance from the very beginning - and this is provided over a considerably extended period. Accordingly, accurate removal of material is ensured. Additionally, the service life of the tool (compared to uncoated tungsten carbide burs) is increased considerably by the hardening process.

Tungsten carbide structure
bredent tungsten carbide tools consist of a metal sintering material with a very fine grain size. Additionally, Diatit tools are subject to a hardening process after the cut has been completed. This hardening process reaches into the gaps between the crytals in a depth of up to 100 mm.



bredent tool with Diatit wear protection.
The surface of the tool is smoothened so that the friction is reduced. The swarf comes off the tools more easily. This results in smoother running of the tool.



bredent tool without Diatit wear protection.
Additionally, - compared to uncoated bredent tungsten carbide tools - jagging of the cutting edges of Diatit tools is avoided due to the wear protection. Compared to uncoated bredent tungsten carbide burs the hardness rises up to 3700 HV (compared to 1850 HV) and results in an increased service life of the tool.



Tungsten carbide tools with relief

Cut: MH

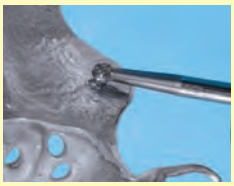




Material Tungsten carbide

REF **H001 MH 23**

ISO-No. 500 104 001190 023



This bur offers numerous possibilities of application; in this picture it is used in the CoCr technique.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-20,000	10-20,000	10-20,000	10-20,000	10-20,000	15-20,000





Material Tungsten carbide

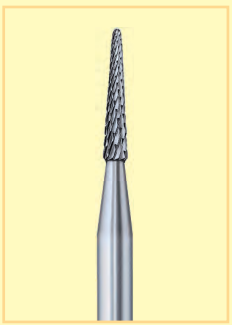
REF **H141 MH 23**

ISO-No. 500 104 141190 023



The tool H141 MH 23 used for grinding a ditch. Smooth, chatter-free running of the relief cut increases the reliability during the application.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-20,000	10-20,000	10-20,000	10-20,000	10-20,000	15-20,000





Material Tungsten carbide

REF **H184 MH 16**

ISO-No. 500 104 184190 016



The high cutting performance of the relief cut allows more efficient treatment of ceramics; the picture shows smoothening of the transitions of metal/ceramic.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material Tungsten carbide

REF **H237 MH 23**

ISO-No. 500 104 237190 023



Tools with relief produce a particularly smooth micrograph. During milling of ceramic materials a silky-mat surface is obtained which is suitable for glaze-firing without any additional treatment. Therefore relief tools ensure high efficiency when processing ceramic materials.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material Tungsten carbide

REF **H277 MH 14**

ISO-No. 500 104 277190 014



REF **H277 MH 23**

ISO-No. 500 104 277190 023



Slender designs allow the use of relief tools even for highly precise work.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000

Cut: MH and GH





Material	Tungsten carbide
REF	**H289 MH 23**
ISO-No.	500 104 289190 023



The tool H289 MH 23 is particularly suitable for grinding VMK veneer surfaces.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide
REF	**H194 GH 40**
ISO-No.	500 104 194220 040



REF	**H194 GH 50**
ISO-No.	500 104 194220 050



Due to the extended service life the relief cut saves material costs Accordingly, costs can be reduced considerably particularly when processing VMK frameworks.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide
REF	**H244 GH 23**
ISO-No.	500 104 244220 023

The shape allows highly accurate finishing of metal structures.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide
REF	**H263 GH 30**
ISO-No.	500 104 263220 030

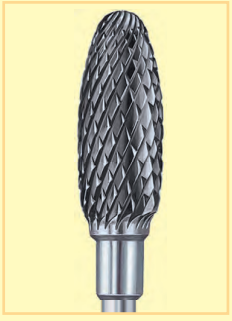


REF	**H263 GH 60**
ISO-No.	500 104 263220 060



Larger amounts of plaster are quickly removed using the large surface of the bur. A smooth surface is created simultaneously.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-15,000	8-12,000	10-17,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide
REF	**H274 GH 40**
ISO-No.	500 104 274220 040



REF	**H274 GH 60**
ISO-No.	500 104 274220 060



A smooth object surface can be produced with the relief cut. This provides considerable advantages when processing resins.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-15,000	8-12,000	10-17,000	15-20,000	15-20,000	15-20,000

Tungsten carbide tools with relief

Cut: SH and NH



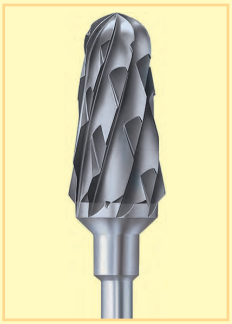


Material	Tungsten carbide
REF	**H274 SH 40**
ISO-No.	500 104 274220 040



The relief cut produces a very smooth object surface. Smooth and chatter-free cutting of the bur leads to safer use by the technician and protects the joints.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-15.000	8-12.000				





Material	Tungsten carbide
REF	**H194 SH 40**
ISO-No.	500 104 194220 040



REF	**H194 SH 60**
ISO-No.	500 104 194220 060



REF	**H194 SH 70**
ISO-No.	500 104 194220 070



Tools with SH cut have been especially developed for processing of plaster. Smooth running of the relief avoids coarse edges in the plaster.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	8-12.000	8-12.000				





Material	Tungsten carbide
REF	**H263 SH 60**
ISO-No.	500 104 263220 060



Bur with relief cut for quick removal of denture resin. Also perfectly suitable for plaster.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-20.000	10-20.000	10-20.000	10-20.000	10-20.000	15-20.000





Material	Tungsten carbide
REF	**H010 NH 08**
ISO-No.	500 104 010006 008



REF	**H010 NH 10**
ISO-No.	500 104 010006 010



REF	**H010 NH 12**
ISO-No.	500 104 010006 012



REF	**H010 NH 16**
ISO-No.	500 104 010006 016



The inverted cone is perfectly suitable for shaping occlusal surfaces. Simultaneously, a brilliant ceramic surface is achieved thanks to the relief cut.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-20,000	10-20,000	10-20,000	10-20,000	15-20,000	15-20,000

Cut: NH

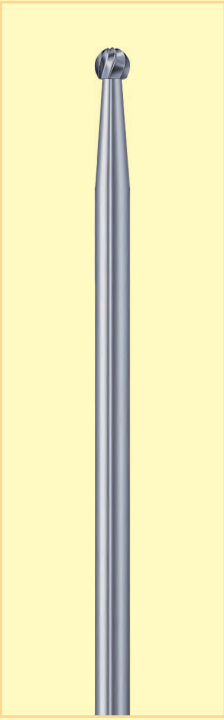
Rapidy Microbur



Optimum cutting performance and long service life due to relief.
The Rapidy Microbur also features a relief. Due to this modern edge geometry the Rapidy exhibits a particularly high cutting performance as well as extraordinarily smooth running.
The dental technician is able to benefit from these properties especially when extremely hard materials have to be processed in a fast and precise manner, e.g. when shaping ceramic or non-precious metal alloys. Even on these materials the Rapidy ensures extensive removal of material and creates a particularly smooth object surface. Additionally, the triple service life that is ensured by the relief allows to save costs.



H001 NH 04: The fine cutting performance of the Rapidy Microbur offers excellent possibilities of design to the ceramic specialist.



Material	Tungsten carbide		
QTY	1 piece	5 pieces	10 pieces
REF	**H001 NH 04**	**330 0050 4**	**330 0100 4**
ISO-No.	500 104 001006 004		
REF	**H001 NH 05**	**330 0050 5**	**330 0100 5**
ISO-No.	500 104 001006 005		
REF	**H001 NH 06**	**330 0050 6**	**330 0100 6**
ISO-No.	500 104 001006 006		
REF	**H001 NH 07**	**330 0050 7**	**330 0100 7**
ISO-No.	500 104 001006 007		
REF	**H001 NH 08**	**330 0050 8**	**330 0100 8**
ISO-No.	500 104 001006 008		
REF	**H001 NH 09**	**330 0050 9**	**330 0100 9**
ISO-No.	500 104 001006 009		
REF	**H001 NH 10**	**330 0051 0**	**330 0101 0**
ISO-No.	500 104 001006 010		
REF	**H001 NH 12**	**330 0051 2**	**330 0101 2**
ISO-No.	500 104 001006 012		
REF	**H001 NH 14**	**330 0051 4**	**330 0101 4**
ISO-No.	500 104 001006 014		
REF	**H001 NH 16**	**330 0051 6**	**330 0101 6**
ISO-No.	500 104 001006 016		
REF	**H001 NH 18**	**330 0051 8**	**330 0101 8**
ISO-No.	500 104 001006 018		
REF	**H001 NH 21**	**330 0052 1**	**330 0102 1**
ISO-No.	500 104 001006 021		
REF	**H001 NH 23**	**330 0052 3**	**330 0102 3**
ISO-No.	500 104 001006 023		
REF	**H001 NH 31**	**330 0053 1**	**330 0103 1**
ISO-No.	500 104 001006 031		

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-20,000	10-20,000	10-20,000	10-20,000	15-20,000	15-20,000

Tungsten carbide tools with relief

Cut: MH/NPM special burs





Material	Tungsten carbide
REF	**N141 MH 23**
ISO-No.	500 104 141190 023



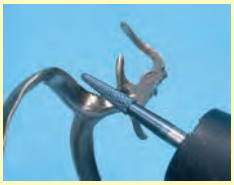
The tool N141 MH 23 during grinding of a ditch. Smooth, chatter-free running of the relief cut increases the reliability during the application.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm					15-20,000	





Material	Tungsten carbide
REF	**N198 MH 23**
ISO-No.	500 104 198190 023



The tool N198 MH 23 during grinding of a ditch. The smooth, chatter-free running of the relief cut increases the reliability during the application.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm					15-20,000	





Material	Tungsten carbide
REF	**N277 MH 14**
ISO-No.	500 104 277190 014



Slender designs allow the use of the relief tools even for very precise work and create an extremely smooth surface.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm					15-20,000	



Assortment

Package contains 7 burs

REF 330 0117 0

Thanks to the special relief cut, extended service life of these burs for non-precious metal alloys is achieved. The modified angle of the relief increases the abrasiveness and leads to a better surface quality which allows to save a considerable amount of time.

Cut: GH/NPM special burs





Material Tungsten carbide

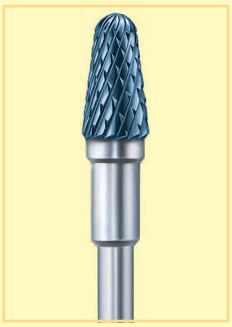
REF **N194 GH 40**

ISO-No. 500 104 194220 040



Thanks to the increased service life the relief cut saves tool costs. Accordingly, costs can be considerably reduced when processing VMK frameworks made of non-precious metal alloys.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm					15-20,000	





Material Tungsten carbide

REF **N263 GH 40**

ISO-No. 500 104 263220 040

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm					15-20,000	



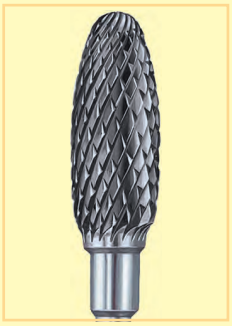


Material Tungsten carbide

REF **N263 GH 60**

ISO-No. 500 104 263220 060

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm					15-20,000	





Material Tungsten carbide

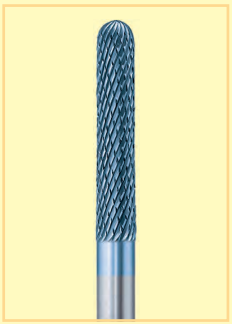
REF **N274 GH 40**

ISO-No. 500 104 274220 040

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm					15-20,000	

Diatit and tungsten carbide tools

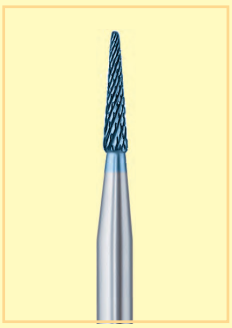
Cut: KF





Material	Tungsten carbide	Diatit
REF	**H137 KF 23**	**D137 KF 23**
ISO-No.	500 104 137140 023	509 104 137140 023

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm		12-18,000	15-20,000	15-20,000	15-20,000	15-20,000



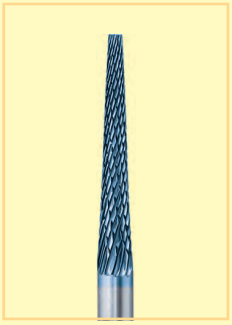


Material	Tungsten carbide	Diatit
REF	**H184 KF 16**	**D184 KF 16**
ISO-No.	500 104 184140 016	509 104 184140 016



Due to the fine cut a smooth surface of the object is obtained. This slender tool is particularly suitable for finishing of veneers.

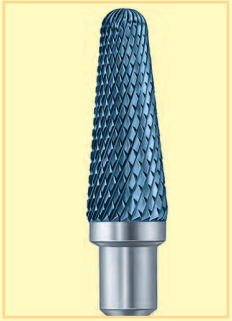
Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm		12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide	Diatit
REF	**H187 KF 23**	**D187 KF 23**
ISO-No.	500 104 187140 023	509 104 187140 023

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm		12-18,000	15-20,000	15-20,000	15-20,000	15-20,000

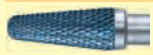




Material	Tungsten carbide	Diatit
REF	**H194 KF 23**	**D194 KF 23**
ISO-No.	500 104 194140 023	509 104 194140 023



REF	**H194 KF 40**	**D194 KF 40**
ISO-No.	500 104 194140 040	509 104 194140 040



REF	**H194 KF 50**	**D194 KF 50**
ISO-No.	500 104 194140 050	509 104 194140 050



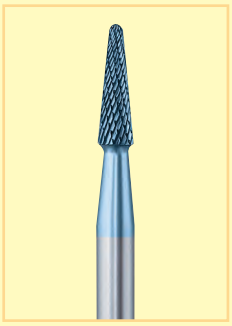
The D194 KF 23 is particularly suitable for finishing of metal-ceramic frames.



The fine micrograph of the KF cut simplifies polishing of the metal surface.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm		12-18,000	15-20,000	15-20,000	15-20,000	15-20,000

Cut: KF





Material	Tungsten carbide	Diatit
REF	**H198 KF 23**	**D198 KF 23**
ISO-No.	500 104 198140 023	509 104 198140 023



The slender design and the smooth micrograph of the D198 KF 23 ensure excellent suitability for processing of partial frameworks.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm		12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide	Diatit
REF	**H200 KF 23**	**D200 KF 23**
ISO-No.	500 104 200140 023	509 104 200140 023

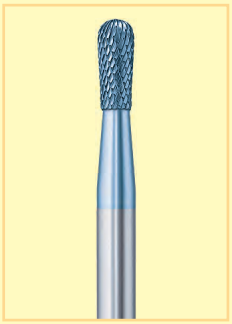
Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm		12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide	Diatit
REF	**H225 KF 23**	**D225 KF 23**
ISO-No.	500 104 225140 023	509 104 225140 023

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm		12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide	Diatit
REF	**H237 KF 23**	**D237 KF 23**
ISO-No.	500 104 237140 023	509 104 237140 023

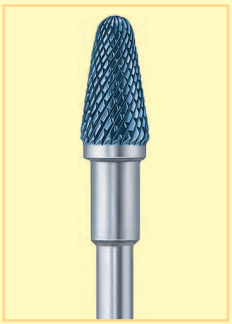


D237 KF 23: Due to the fine cut a smooth surface can be achieved on hard alloys as well.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm		12-18,000	15-20,000	15-20,000	15-20,000	15-20,000

Diatit and tungsten carbide tools

Cut: KF



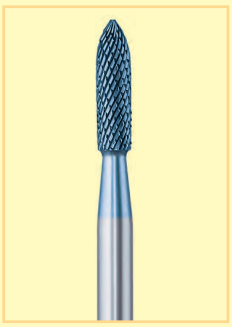


Material	Tungsten carbide	Diatit
REF	**H263 KF 40**	**D263 KF 40**
ISO-No.	500 104 263140 040	509 104 263140 040



The D263 KF 40 can be used for a wide range of applications in the CoCr technique.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm		12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide	Diatit
REF	**H289 KF 23**	**D289 KF 23**
ISO-No.	500 104 289140 023	509 104 289140 023



The KF cut is perfectly suitable for finishing of metal ceramic veneers.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm		12-18,000	15-20,000	15-20,000	15-20,000	15-20,000

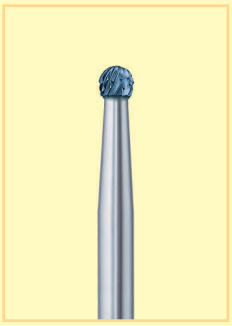




Material	Tungsten carbide	Diatit
REF	**H292 KF 23**	**D292 KF 23**
ISO-No.	500 104 292140 023	509 104 292140 023

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm		12-18,000	15-20,000	15-20,000	15-20,000	15-20,000

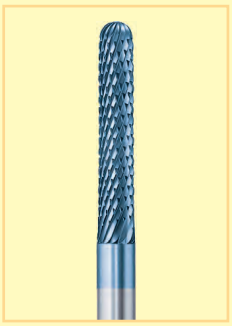
Cut: KM





Material	Tungsten carbide	Diatit
REF	**H001 KM 23**	**D001 KM 23**
ISO-No.	500 104 001190 023	509 104 001190 023

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide	Diatit
REF	**H137 KM 23**	**D137 KM 23**
ISO-No.	500 104 137190 023	509 104 137190 023



Due to the smooth running and the excellent cutting performance, this tool is particularly suitable for precise and efficient finishing.

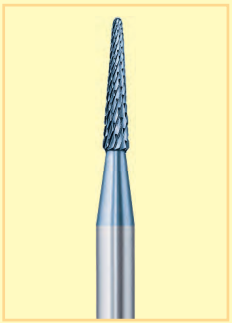
Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide	Diatit
REF	**H141 KM 23**	**D141 KM 23**
ISO-No.	500 104 141190 023	509 104 141190 023

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide	Diatit
REF	**H184 KM 16**	**D184 KM 16**
ISO-No.	500 104 184190 016	509 104 184190 016

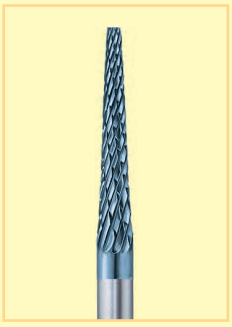


Application example.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000

Diatit and tungsten carbide tools

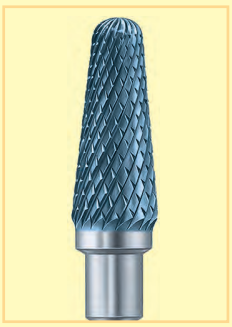
Cut: KM



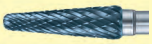


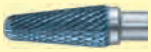
Material	Tungsten carbide	Diatit
REF	**H187 KM 23**	**D187 KM 23**
ISO-No.	500 104 187190 023	509 104 187190 023

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000



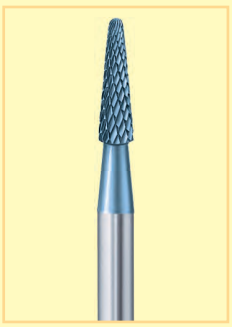






Material	Tungsten carbide	Diatit
REF	**H194 KM 23**	**D194 KM 23**
ISO-No.	500 104 194190 023	509 104 194190 023
REF	**H194 KM 40**	**D194 KM 40**
ISO-No.	500 104 194190 040	509 104 194190 040
REF	**H194 KM 50**	**D194 KM 50**
ISO-No.	500 104 194190 050	509 104 194190 050

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000



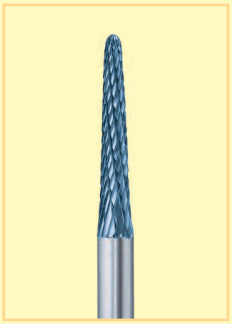


Material	Tungsten carbide	Diatit
REF	**H198 KM 23**	**D198 KM 23**
ISO-No.	500 104 198190 023	509 104 198190 023



Efficient and controlled finishing due to the slender tool with KM cut.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide	Diatit
REF	**H200 KM 23**	**D200 KM 23**
ISO-No.	500 104 200190 023	509 104 200190 023

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





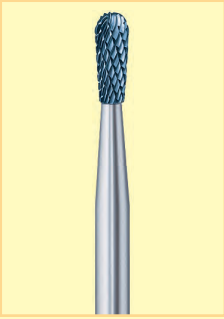
Material	Tungsten carbide	Diatit
REF	**H225 KM 23**	**D225 KM 23**
ISO-No.	500 104 225190 023	509 104 225190 023



D225 KM 23 for regrinding exact transitions of metal/resin.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000

Cut: KM



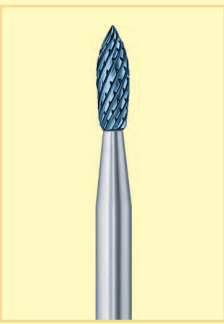


Material	Tungsten carbide	Diatit
REF	**H237 KM 23**	**D237 KM 23**
ISO-No.	500 104 237190 023	509 104 237190 023



This tool is particularly suitable for designing filigree CoCr frameworks.

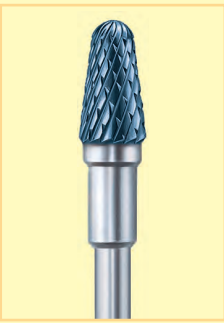
Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide	Diatit
REF	**H257 KM 16**	**D257 KM 16**
ISO-No.	500 104 257190 016	509 104 257190 016
REF	**H257 KM 23**	**D257 KM 23**
ISO-No.	500 104 257190 023	509 104 257190 023

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide	Diatit
REF	**H263 KM 40**	**D263 KM 40**
ISO-No.	500 104 263190 040	509 104 263190 040



Controlled removal of material with the bredent KM tool.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide	Diatit
REF	**H277 KM 14**	**D277 KM 14**
ISO-No.	500 104 277190 014	509 104 277190 014
REF	**H277 KM 23**	**D277 KM 23**
ISO-No.	500 104 277190 023	509 104 277190 023

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000

Diatit and tungsten carbide tools

Cut: KM and QM





Material	Tungsten carbide	Diatit
REF	**H289 KM 23**	**D289 KM 23**
ISO-No.	500 104 289190 023	509 104 289190 023



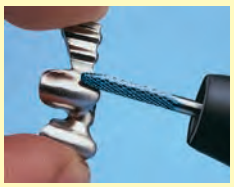
Finishing of precious metal alloys: D289 KM 23

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000



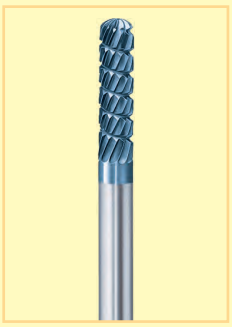


Material	Tungsten carbide	Diatit
REF	**H292 KM 23**	**D292 KM 23**
ISO-No.	500 104 292190 023	509 104 292190 023



Fine cutting performance and smooth surface of the object: D292 KM 23 - application example in the precious metal technique

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20,000	12-18,000	15-20,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide	Diatit
REF	**H137 QM 23**	**D137 QM 23**
ISO-No.	500 104 137134 023	509 104 137134 023



Precious metal technique: Smooth surface of the object, tool is running steadily.

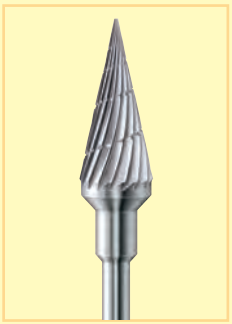


The fine cutting performance and the smooth running of this tool ensure efficient working in the field of resins as well.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	15-20.000	15-18.000	15-20.000	15-20.000	15-20.000	15-20.000

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Cut: QG





Material	Tungsten carbide
REF	**H161 QG 60**
ISO-No.	500 104 161220 060



The tapering tip is particularly suited to the delicate and precise processing of plastics. It is also perfect for use in the splint technique.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm		10-20,000				





Material	Tungsten carbide
REF	**S187 QG 23**
ISO-No.	500 104 187 023



Due to the different shapes, these burs can be used to shape silicone and also in hardly accessible areas, such as in the alveoli of the gingival mask.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic	Silicone
Working speed rpm							30.000





Material	Tungsten carbide
REF	**S237 QG 65**
ISO-No.	500 104 237 065



Due to controlled removal of material, a smooth transition zone from the silicone to the denture resin is achieved. The ground surface is smooth and free from grooves.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic	Silicone
Working speed rpm							20.000





Material	Tungsten carbide
REF	**S263 QG 60**
ISO-No.	500 104 263 060

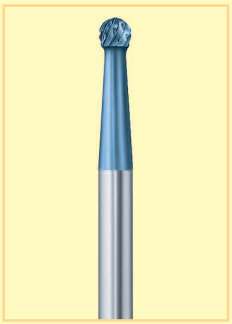


Thermoformed, soft thermoplastic plates with different hardness degrees are rapidly and safely ground with these silicone burs, e.g. for sports mouth guards.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic	Silicone
Working speed rpm							18.000

Diatit and tungsten carbide tools

Cut: KG





Material	Tungsten carbide	Diatit
REF	**H001 KG 23**	**D001 KG 23**
ISO-No.	500 104 001215 023	509 104 001215 023



D001 KG 23: Removal of bubbles in the precious metal technique.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-20,000	8-12,000	10-17,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide	Diatit
REF	**H137 KG 23**	**D137 KG 23**
ISO-No.	500 104 137220 023	509 104 137220 023

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-20,000	8-12,000	10-17,000	15-20,000	15-20,000	15-20,000



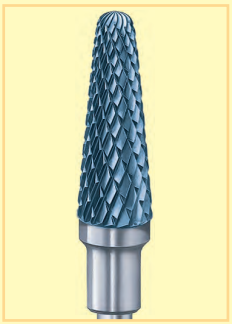


Material	Tungsten carbide	Diatit
REF	**H187 KG 23**	**D187 KG 23**
ISO-No.	500 104 187220 023	509 104 187220 023



The slender design and the fine cutting performance of the D187 KG 23 render this tool indispensable for the use in the CoCr technique.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-20,000	8-12,000	10-17,000	15-20,000	15-20,000	15-20,000





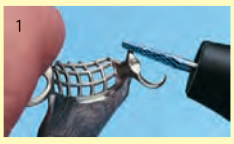
Material	Tungsten carbide	Diatit
REF	**H194 KG 23**	**D194 KG 23**
ISO-No.	500 104 194220 023	509 104 194220 023



REF	**H194 KG 40**	**D194 KG 40**
ISO-No.	500 104 194220 040	509 104 194220 040



REF	**H194 KG 50**	**D194 KG 50**
ISO-No.	500 104 194220 050	509 104 194220 050



D194 KG 23 for efficient CoCr processing

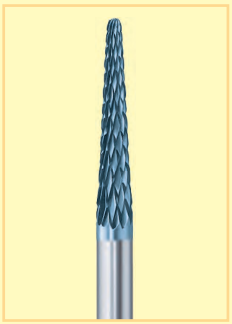


The coarse cuts of the D194 KG 40 (picture 3) and the D194 KG 50 (picture 2) guarantee fast and perfect finishing of resin.



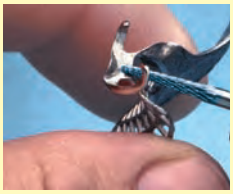
Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-20,000	8-12,000	10-17,000	15-20,000	15-20,000	15-20,000

Cut: KG





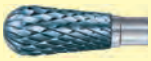
Material	Tungsten carbide	Diatit
REF	**H200 KG 23**	**D200 KG 23**
ISO-No.	500 104 200220 023	509 104 200220 023



D200 KG 23 for finishing of CoCr frameworks.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-20,000	8-12,000	10-17,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide	Diatit
REF	**H237 KG 65**	**D237 KG 65**
ISO-No.	500 104 237220 065	509 104 237220 065



D237 KG 65 excellent removal of material and smooth running for efficient processing of resin.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-20,000	8-12,000	10-17,000	15-20,000	15-20,000	15-20,000





Material	Tungsten carbide	Diatit
REF	**H263 KG 60**	**D263 KG 60**
ISO-No.	500 104 263220 060	509 104 263220 060



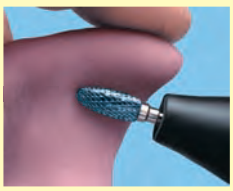
Due to its shape and the coarse cut the D263 KG 60 is well suited for grinding of plaster dies..

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-20,000	8-12,000	10-17,000	15-20,000	15-20,000	15-20,000



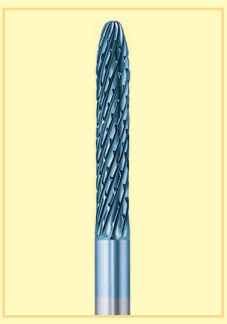


Material	Tungsten carbide	Diatit
REF	**H274 KG 60**	**D274 KG 60**
ISO-No.	500 104 274220 060	509 104 274200 060



The D274 KG 60 is suitable for all materials due to this coarse cut.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-20,000	8-12,000	10-17,000	15-20,000	15-20,000	15-20,000



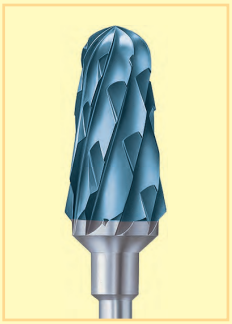


Material	Tungsten carbide	Diatit
REF	**H292 KG 23**	**D292 KG 23**
ISO-No.	500 104 292220 023	509 104 292220 023

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	10-20,000	8-12,000	10-17,000	15-20,000	15-20,000	15-20,000

Diatit and tungsten carbide tools

Cut: KS and GG







Material	Tungsten carbide	Diatit
REF	**H194 KS 60**	**D194 KS 60**
ISO-No.	500 104 194223 060	509 104 194223 060
REF	**H194 KS 70**	**D194 KS 70**
ISO-No.	500 104 194223 070	509 104 194223 070

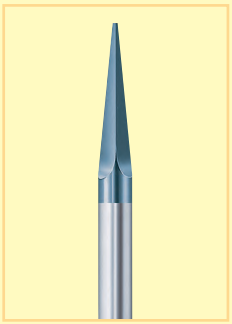


D194 KS 60: The super-coarse cut guarantees a particularly powerful cutting performance.



D194 KS 70: The super-coarse cut is particularly effective on plaster and resin.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	8-12,000	8-12,000				







Material	Tungsten carbide	Diatit
REF	**H468 GG 16**	**D468 GG 16**
ISO-No.	500 104 468211 016	509 104 468211 016
REF	**H468 GG 23**	**D468 GG 23**
ISO-No.	500 104 468211 023	509 104 468211 023



Simple and precise cutting of plate material is possible due to the straight cut.



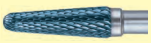
Smearing of the plate material due to overheating is avoided so that fast and reliable working is ensured.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm	8-12.000	8-12.000				

Cut: KC

KC cut: Special cut for CoCr and non-precious metal alloys.
The KC cut provides high cutting performance on hard alloys. Coarse metal swarf results which can not penetrate into the technician's skin. The KC cut rationalizes surface working and simultaneously avoids injuries to the skin.





Material	Diatit
REF	**D194 KC 40**
ISO-No.	509 104 194190 040



The KC cut ensures gentle and pressure-free milling with high cutting performance.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm					10-20,000	





Material	Diatit
REF	**D251 KC 60**
ISO-No.	509 104 251190 060



The KC cut by bredent guarantees efficient finishing of CoCr frames.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm					10-20,000	





Material	Diatit
REF	**D292 KC 23**
ISO-No.	509 104 292190 023



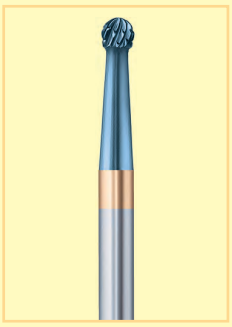
The high cutting performance ensures efficient finishing of crowns and bridges made of non-precious metal alloys.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	CoCr denture/NPM	Ceramic
Working speed rpm					10-20,000	

Processing of titanium

Cut: KT

KT cut: Especially for processing of titanium.
At 850 °C titanium reacts with the oxygen in the ambient air and forms a surface with undesired material characteristics (e.g. discolourations, insufficient polishing capacity, embrittlement, etc.). Due to the special diagonal cut the tools with the KT cut offer a larger swarf-cutting volume so that the swarf comes off the tool more easily and the friction is reduced. This special cut avoids overheating of the titanium caused by friction heat. Consequently, this cut ensures efficient and careful removal of material and produces a smooth surface.





Material Diatit

REF **D001 KT 14**

ISO-No. 509 104 001190 014



REF **D001 KT 23**

ISO-No. 509 104 001190 023



The different shapes of the titanium burs by bredent guarantee efficient and reliable processing of titanium frames.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	Titanium	Ceramic
Working speed rpm					10-15,000	





Material Diatit

REF **D194 KT 23**

ISO-No. 509 104 194190 023



REF **D194 KT 40**

ISO-No. 509 104 194190 040



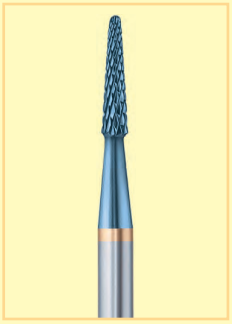
REF **D194 KT 50**

ISO-No. 509 104 194190 050



D194 KT 23: For controlled processing of areas difficult to access.

Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	Titanium	Ceramic
Working speed rpm					size 23+40: 20-25,000 size 50: 20,000	





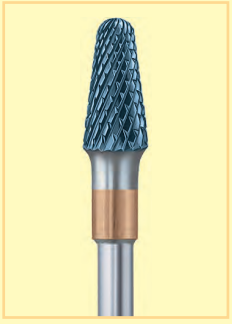
Material Diatit

REF **D198 KT 23**

ISO-No. 509 104 198190 023



Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	Titanium	Ceramic
Working speed rpm					25-30,000	





Material Diatit

REF **D263 KT 40**

ISO-No. 509 104 263190 040



Application field	Plaster	Denture resin	Veneer resin	Precious metal/pd-based	Titanium	Ceramic
Working speed rpm					20-25,000	

Titanium Finishing Set



Finish titanium rationally using cutters, polishers, brushes and pastes developed specifically for use on titanium.

Extra-sharp blades, special blade geometry and cutter blades combined with Diatit wear-resistance, which has been proven for many years, guarantee that titanium can be finished quickly, without harming the material yet reducing heat development.





Recommended speed
20,000 r.p.m.
REF D 194 KT 50





Recommended speed
20-25,000 r.p.m.
REF D 194 KT 40

The titanium-Diatit-cutter grinds exceptionally abrasively yet runs extremely smoothly on the titanium surface. Thus, one can work accurately and quickly to achieve a uniformly smooth ground surface.





Recommended speed
25-30,000 r.p.m.
REF D 198 KT 23





Recommended speed
10-15,000 r.p.m.
REF D 001 KT 14

Thanks to the various shapes and sizes, even areas which are narrow and difficult to access can be finished precisely. When used at the correct speed (refer to range of speeds) and only minimal pressure is exerted, the titanium-Diatit-cutter grinds exceptionally well and lasts a very long time.



Titapol
150 g
REF 520 0015 3
350 g
REF 520 0015 4



Abraso-Star Glaze
REF 520 0016 3



Titapol pre high-lustre polishing paste and Abraso-Star universal high-lustre polishing paste - the perfect combination for excellent polishing.



Beech wood stand
8Bo/HP
REF 210 0043 0

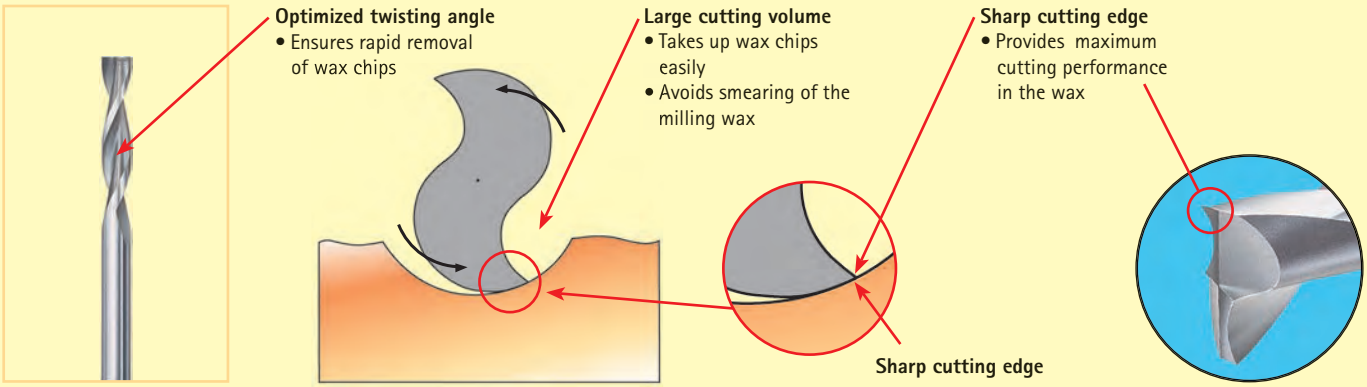
Finishing set for titanium

REF 350 0089 0

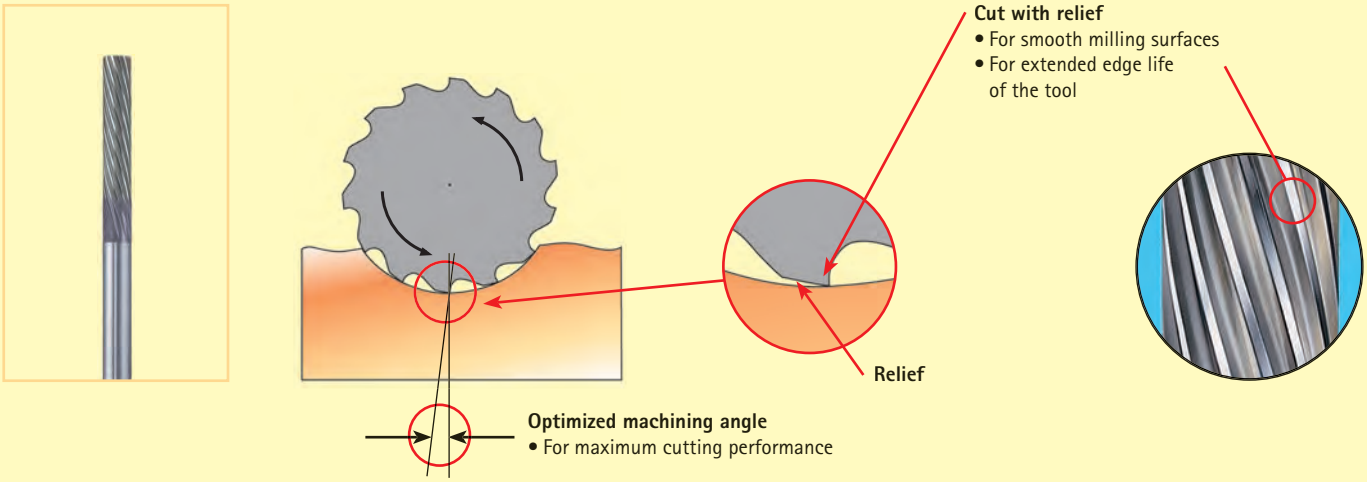
	Refill packs:
1 Diatit tungsten carbide cutter, D194 KT 50	**REF D194 KT 50**
1 Diatit tungsten carbide cutter, D194 KT 40	**REF D194 KT 40**
1 Diatit tungsten carbide cutter, D198 KT 23	**REF D198 KT 23**
1 Diatit tungsten carbide cutter, D001 KT 14	**REF D001 KT 14**
1 Titapol pre-polishing wheel	**REF 350 0087 0**
1 Titapol pre-polishing cylinder	**REF 350 0088 0**
1 Round brush zwm db 19 Ø goat hair, white, mounted, double rows	**REF 350 0054 0**
1 Cotton buff, for handpiece	**REF 350 0065 0**
1 Abraso-Soft Metal CSF 2/80 chunking, black, white textile insert	**REF 350 0081 0**
1 High-luster buff, metal, 50 L/100	**REF 350 0083 0**
1 Titapol pre-polishing paste, 150 g	**REF 520 0015 3**
1 Abraso-Star asg universal high-luster polishing	**REF 520 0016 3**
1 Beech wood stand 8Bo/HP	**REF 210 0043 0**

Tools with relief for the milling technique

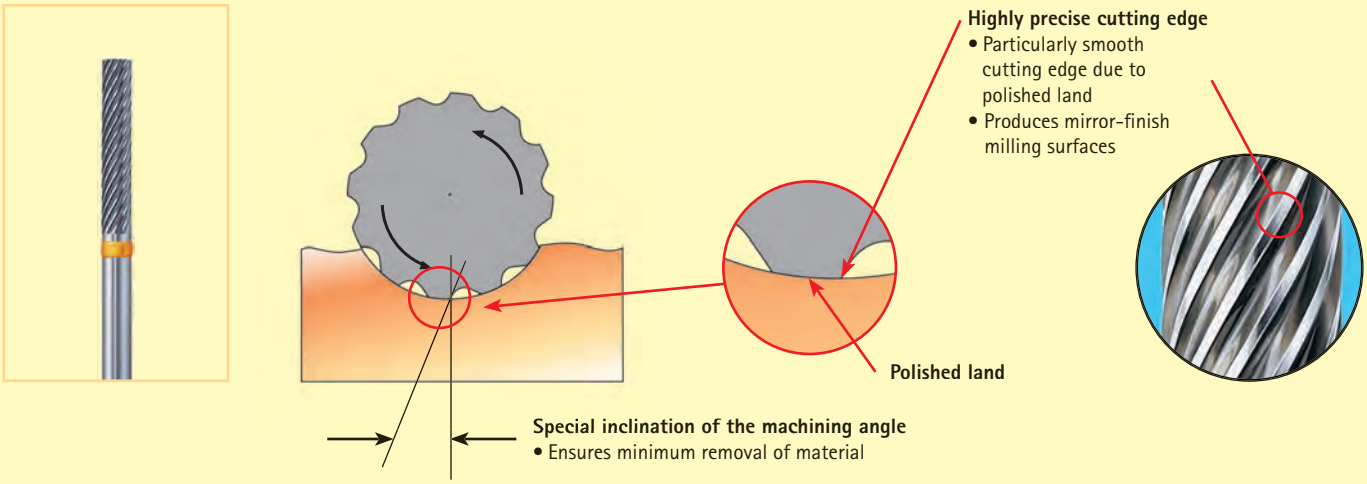
Wax bur



Profile bur



Polishing bur



bredent group

Biotec milling wax



Excellent milling wax with superb modelling properties. Outstanding scraping and milling properties since sticking of wax to the bur is avoided.



Biotec milling wax
28 g
REF 510 0061 4



Enormous amount of time is saved due to good modelling properties since no other wax is required for the shear distributor.

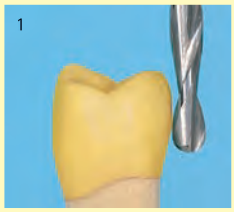


Extremely accurate milling wax to produce smooth and shining surfaces during milling.

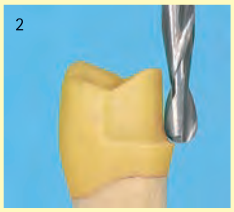


Can be used for press ceramics since the wax burns out almost entirely.

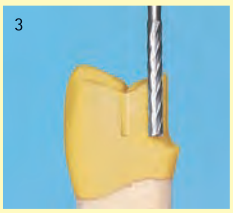
Systematic preparation of a groove-shoulder attachment with the milling technique tool set by bredent



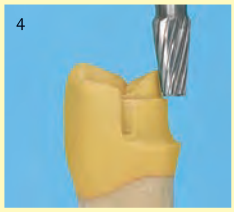
It is recommended to model the entire, planned crown in wax prior to starting the milling work.



In the first step a semi-round shoulder with a marginal step is prepared with the wax bur F137 3W 23.



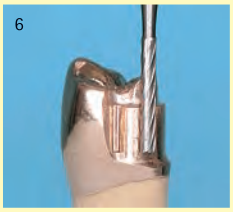
Then the approximal grooves are prepared with the groove bur F538 3H 10.



Finally, the occlusal shoulder is completed with the shoulder bur F205 3H 27.



After casting and finishing of the crown, the parallel surface is remilled with the profile bur F137 3H 23.



Remilling of the groove is carried out with the tool F 538 3H 10. During this process the groove bur should only be moved up and down in the vertical axis.



The occlusal shoulder is reworked with the tool F205 3H 27.



Finally, a high lustre is achieved on the parallel surface using the polishing bur F137 3P 23.



The milling tools with relief by bredent produce a perfect high lustre so that additional polishing is not required.



A secondary element is modelled with the pattern resin Pi-Ku-Plast and – if required – shaped with rotating tools.



The secondary element is cast and placed onto the primary element.



The low shrinkage of the pattern resin ensures excellent precision of fit of the secondary element.

Wax bur, parallel, round face



Material	Tungsten carbide	Tungsten carbide
Shaft	Ø 2.35 mm short *	Ø 3.00 mm short **
REF	**F137 2W 07**	**F137 3W 07**
ISO No.	500 103 137366 007	500 123 137366 007
REF	**F137 2W 10**	**F137 3W 10**
ISO No.	500 103 137366 010	500 123 137366 010
REF	**F137 2W 15**	**F137 3W 15**
ISO No.	500 103 137366 015	500 123 137366 015
REF	**F137 2W 23**	**F137 3W 23**
ISO No.	500 103 137366 023	500 123 137366 023
working speed on wax		2,500 - 5,000 rpm



The wax bur F137 3W 23 features rounded face cut. Therefore it is perfectly suitable to prepare precise ditches in the marginal area.

* shaft Ø 2.35 short: total length of tool 34 mm
** shaft Ø 3.00 short: total length of tool 30 mm

Profile bur, parallel, round face



Material	Tungsten carbide	Tungsten carbide
Shaft	Ø 2.35 mm short *	Ø 3.00 mm short **
REF	**F137 2H 07**	**F137 3H 07**
ISO No.	500 103 137103 007	500 123 137103 007
REF	**F137 2H 10**	**F137 3H 10**
ISO No.	500 103 137103 010	500 123 137103 010
REF	**F137 2H 15**	**F137 3H 15**
ISO No.	500 103 137103 015	500 123 137103 015
REF	**F137 2H 23**	**F137 3H 23**
ISO No.	500 103 137103 023	500 123 137103 023
working speed on precious metal		15,000 - 20,000 rpm



The round face cut of the profile bur F137 3H 23 corresponds to the face cut of the wax bur shown above. Precisely designed ditches in wax can be milled additionally and easily with the suitable profile bur.

* shaft Ø 2.35 short: total length of tool 34 mm
** shaft Ø 3.00 short: total length of tool 30 mm

Polishing bur, parallel, round face

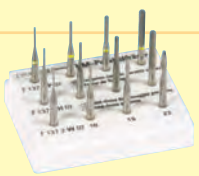


Material	Tungsten carbide	Tungsten carbide
Shaft	Ø 2.35 mm short *	Ø 3.00 mm short **
REF	**F137 2P 07**	**F137 3P 07**
ISO No.	500 103 137102 007	500 123 137102 007
REF	**F137 2P 10**	**F137 3P 10**
ISO No.	500 103 137102 010	500 123 137102 010
REF	**F137 2P 15**	**F137 3P 15**
ISO No.	500 103 137102 015	500 123 137102 015
REF	**F137 2P 23**	**F137 3P 23**
ISO No.	500 103 137102 023	500 123 137102 023
working speed on precious metal		18,000 - 20,000 rpm



A mirror-finish surface is prepared with the polishing bur F137 3P 23. The identical face cuts of all wax, profile and polishing burs of the same size simplify designing of a perfect marginal ditch.

* shaft Ø 2.35 short: total length of tool 34 mm
** shaft Ø 3.00 short: total length of tool 30 mm



Assortment

12 pieces, 1 piece each
REF 330 0082 5



Milling and drilling oil
see page 449
REF 550 0000 8

Wax bur, parallel, straight face



Material	Tungsten carbide	Tungsten carbide
Shaft	Ø 2.35 mm short *	Ø 3.00 mm short **
REF	**F116 2W 07**	**F116 3W 07**
ISO No.	500 103 116366 007	500 123 116366 007
REF	**F116 2W 10**	**F116 3W 10**
ISO No.	500 103 116366 010	500 123 116366 010
REF	**F116 2W 15**	**F116 3W 15**
ISO No.	500 103 116366 015	500 123 116366 015
REF	**F116 2W 23**	**F116 3W 23**
ISO No.	500 103 116366 023	500 123 116366 023
working speed on wax		2,500 - 5,000 rpm



Wax bur F116 3W 23: Smooth and precise wax surfaces due to modern cutting edge geometry. Milling tools with straight face are particularly suitable for tangential borders in the marginal area.

Profile bur, parallel, straight face



Material	Tungsten carbide	Tungsten carbide
Shaft	Ø 2.35 mm short *	Ø 3.00 mm short **
REF	**F116 2H 07**	**F116 3H 07**
ISO No.	500 103 116103 007	500 123 116103 007
REF	**F116 2H 10**	**F116 3H 10**
ISO No.	500 103 116103 010	500 123 116103 010
REF	**F116 2H 15**	**F116 3H 15**
ISO No.	500 103 116103 015	500 123 116103 015
REF	**F116 2H 23**	**F116 3H 23**
ISO No.	500 103 116103 023	500 123 116103 023
working speed on precious metal		15,000 - 20,000 rpm



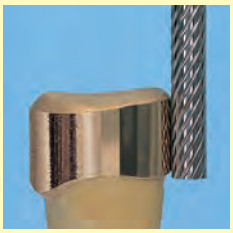
Rapid and precise shaping with the profile bur F116 3H 23: The relief technology allows to obtain excellent cutting performance.

* shaft Ø 2.35 short: total length of tool 34 mm
** shaft Ø 3.00 short: total length of tool 30 mm

Polishing bur, parallel, straight face

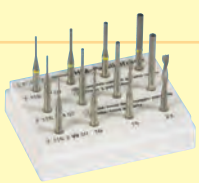


Material	Tungsten carbide	Tungsten carbide
Shaft	Ø 2.35 mm short *	Ø 3.00 mm short **
REF	**F116 2P 07**	**F116 3P 07**
ISO No.	500 103 116102 007	500 123 116102 007
REF	**F116 2P 10**	**F116 3P 10**
ISO No.	500 103 116102 010	500 123 116102 010
REF	**F116 2P 15**	**F116 3P 15**
ISO No.	500 103 116102 015	500 123 116102 015
REF	**F116 2P 23**	**F116 3P 23**
ISO No.	500 103 116102 023	500 123 116102 023
working speed on precious metal		18,000 - 20,000 rpm



The high-lustre polished land allows to prepare high-lustrous milling surfaces. The secondary elements can be attached to these surfaces without subsequent polishing. This way precision is increased and working time is saved.

* shaft Ø 2.35 short: total length of tool 34 mm
** shaft Ø 3.00 short: total length of tool 30 mm



Assortment

12 pieces, 1 piece each
REF 330 0082 4

Profile bur abrasive, parallel round face



Material	Tungsten carbide	Tungsten carbide
Shaft	Ø 2.35 mm short *	Ø 3.00 mm short **
REF	**N137 2H 10**	**N137 3H 10**
ISO No.	500 103 137 103 010	500 123 137 103 010
REF	**N137 2H 15**	**N137 3H 15**
ISO No.	500 103 137 103 015	500 123 137 103 015
REF	**N137 2H 23**	**N137 3H 23**
ISO No.	500 103 137 103 023	500 123 137 103 023
working speed of non-precious metal	20,000 - 25,000 rpm	

* shaft Ø 2.35 short: total length of tool 34 mm
** shaft Ø 3.00 short: total length of tool 30 mm

Polishing bur abrasive, parallel round face



Material	Tungsten carbide	Tungsten carbide
Shaft	Ø 2.35 mm short *	Ø 3.00 mm short **
REF	**N137 2P 10**	**N137 3P 10**
ISO No.	500 103 137 102 010	500 123 137 102 010
REF	**N137 2P 15**	**N137 3P 15**
ISO No.	500 103 137 102 015	500 123 137 102 015
REF	**N137 2P 23**	**N137 3P 23**
ISO No.	500 103 137 102 023	500 123 137 102 023
working speed of non-precious metal	10,000 - 20,000 rpm	

* shaft Ø 2.35 short: total length of tool 34 mm
** shaft Ø 3.00 short: total length of tool 30 mm

Abrasive burs for titanium, precious and non-precious metal and milling work.

The cutting edge geometry has been especially designed for rapid removal of material. The relief ensures smooth running and allows to obtain very smooth surfaces on the object to be milled. The wide relief extends the edge life and avoids breaking of the sharp cutting edges.



Milling and drilling oil
see page 449
REF 550 0000 8

bredent group

Profile bur abrasive, parallel straight face



Material	Tungsten carbide	Tungsten carbide
Shaft	Ø 2.35 mm short *	Ø 3.00 mm short **
REF	**N116 2H 10**	**N116 3H 10**
ISO No.	500 103 116 103 010	500 123 116 103 010
REF	**N116 2H 15**	**N116 3H 15**
ISO No.	500 103 116 103 015	500 123 116 103 015
REF	**N116 2H 23**	**N116 3H 23**
ISO No.	500 103 116 103 023	500 123 116 103 023
working speed of non-precious metal	20,000 - 25,000 rpm	

* shaft Ø 2.35 short: total length of tool 34 mm
** shaft Ø 3.00 short: total length of tool 30 mm

Polishing bur abrasive, parallel straight face



Material	Tungsten carbide	Tungsten carbide
Shaft	Ø 2.35 mm short *	Ø 3.00 mm short **
REF	**N116 2P 10**	**N116 3P 10**
ISO No.	500 103 116 102 010	500 123 116 102 010
REF	**N116 2P 15**	**N116 3P 15**
ISO No.	500 103 116 102 015	500 123 116 102 015
REF	**N116 2P 23**	**N116 3P 23**
ISO No.	500 103 116 102 023	500 123 116 102 023
working speed of non-precious metal	10,000 - 20,000 rpm	

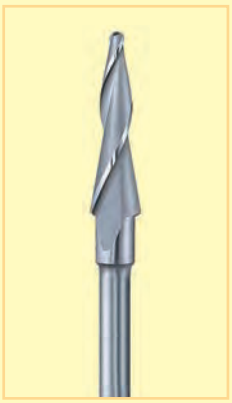
* shaft Ø 2.35 short: total length of tool 34 mm
** shaft Ø 3.00 short: total length of tool 30 mm

A rich quantity of milling and drilling oil is applied onto the milling surface and a speed of 20,000 - 25,000 rpm is used for milling. Whilst adding a copious quantity of milling and drilling oil, the milling surface is prepolished with the polishing bur at 20,000 rpm and then polished to high lustre at 10,000 rpm.

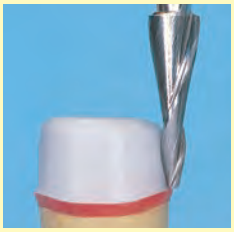


Milling and drilling oil
see page 449
REF 550 0000 8

Wax bur, conical, round face



	Material	Tungsten carbide	Tungsten carbide
	Shaft	Ø 2.35 mm short	Ø 3.00 mm short
conical 2°	**REF**	**F200 2W 23**	**F200 3W 23**
	ISO No.	500 103 200362 023	500 123 200362 023
conical 4°	**REF**	**F200 2W 31**	**F200 3W 31**
	ISO No.	500 103 200362 031	500 123 200362 031
conical 6°	**REF**	**F200 2W 40**	**F200 3W 40**
	ISO No.	500 103 200362 040	500 123 200362 040
	working speed on wax		2,500 - 5,000 rpm



total length: 32 mm

Preparation of a tapered crown with marginal ditch: The wax bur F200 3W 40 features a rounded face. First a wax pattern is prepared with this wax bur. The rounded face features a sharp cutting edge and produces a precise ditch.

Profile bur, conical, round face



	Material	Tungsten carbide	Tungsten carbide
	Shaft	Ø 2.35 mm short	Ø 3.00 mm short
conical 2°	**REF**	**F200 2H 23**	**F200 3H 23**
	ISO No.	500 103 200103 023	500 123 200103 023
conical 4°	**REF**	**F200 2H 31**	**F200 3H 31**
	ISO No.	500 103 200103 031	500 123 200103 031
conical 6°	**REF**	**F200 2H 40**	**F200 3H 40**
	ISO No.	500 103 200103 040	500 123 200103 040
	working speed on precious metal		15,000 - 20,000 rpm



total length: 32 mm

The object is shaped with the profile bur after casting. The radius of the face cut has been precisely matched with the corresponding wax bur. Accordingly, the ditch can be shaped quickly.

Polishing bur, conical, round face



	Material	Tungsten carbide	Tungsten carbide
	Shaft	Ø 2.35 mm short	Ø 3.00 mm short
conical 2°	**REF**	**F200 2P 23**	**F200 3P 23**
	ISO No.	500 103 200133 023	500 123 200133 023
conical 4°	**REF**	**F200 2P 31**	**F200 3P 31**
	ISO No.	500 103 200133 031	500 123 200133 031
conical 6°	**REF**	**F200 2P 40**	**F200 3P 40**
	ISO No.	500 103 200133 040	500 123 200133 040
	working speed on precious metal		15,000 - 20,000 rpm



total length: 32 mm

After contouring, the surface is finished with the polishing bur. Slight reworking with the polishing bur allows to obtain high lustre polishing even in the area of the ditch, since the radiuses of the polishing, profile and wax burs are absolutely identical.



Milling and drilling oil
see page 449
REF 550 0000 8

Wax bur, conical, straight face



Material	Tungsten carbide	Tungsten carbide
Shaft	Ø 2.35 mm short	Ø 3.00 mm short
REF	**F186 2W 23**	**F186 3W 23**
conical 2° ISO No.	500 103 186362 023	500 123 186362 023
REF	**F186 2W 31**	**F186 3W 31**
conical 4° ISO No.	500 103 186362 031	500 123 186362 031
REF	**F186 2W 40**	**F186 3W 40**
conical 6° ISO No.	500 103 186362 040	500 123 186362 040
working speed on wax		2,500 - 5,000 rpm



total length: 32 mm

Preparation of a tapered crown with tangential marginal design: The wax bur F186 3W 40 is perfectly suitable for this task. First the wax pattern is prepared with the wax bur. The sharp cutting edges ensure particularly smooth wax surfaces.

Profile bur, conical, straight face



Material	Tungsten carbide	Tungsten carbide
Shaft	Ø 2.35 mm short	Ø 3.00 mm short
REF	**F186 2H 23**	**F186 3H 23**
conical 2° ISO No.	500 103 186103 023	500 123 186103 023
REF	**F186 2H 31**	**F186 3H 31**
conical 4° ISO No.	500 103 186103 031	500 123 186103 031
REF	**F186 2H 40**	**F186 3H 40**
conical 6° ISO No.	500 103 186103 040	500 123 186103 040
working speed on precious metal		15,000 - 20,000 rpm



total length: 32 mm

The friction surfaces of the primary crown are precisely shaped with the profile bur. The optimized cutting angle of the profile bur ensures efficient profile milling.

Polishing bur, conical, straight face



Material	Tungsten carbide	Tungsten carbide
Shaft	Ø 2.35 mm short	Ø 3.00 mm short
REF	**F186 2P 23**	**F186 3P 23**
conical 2° ISO No.	500 103 186133 023	500 123 186133 023
REF	**F186 2P 31**	**F186 3P 31**
conical 4° ISO No.	500 103 186133 031	500 123 186133 031
REF	**F186 2P 40**	**F186 3P 40**
conical 6° ISO No.	500 103 186133 040	500 123 186133 040
working speed on precious metal		15,000 - 20,000 rpm



total length: 32 mm

After profile milling, a mirror-like high lustre is produced on the friction surface using the polishing bur. Additional polishing of the surface is no longer required.



Milling and drilling oil
see page 449
REF 550 0000 8

Profile bur, abrasive, conical, round face



	Material	Tungsten carbide	Tungsten carbide
	Shaft	Ø 2.35 mm short	Ø 3.00 mm short
conical 2°	**REF**	**N200 2H 23**	**N200 3H 23**
	ISO No.	500 103 200 103 023	500 123 200 103 023
conical 4°	**REF**	**N200 2H 31**	**N200 3H 31**
	ISO No.	500 103 200 103 031	500 a123 200 103 031
conical 6°	**REF**	**N200 2H 40**	**N200 3H 40**
	ISO No.	500 103 200 103 040	500 123 200 103 040

working speed of non-precious metal 20,000 - 25,000 rpm

total length 32 mm

Abrasive burs for titanium, precious and non-precious metal and milling work.

The cutting edge geometry has been especially designed for rapid removal of material. The relief ensures smooth running and allows to obtain very smooth surfaces on the object to be milled. The wide relief extends the edge life and avoids breaking of the sharp cutting edges.

Profile bur, abrasive, conical, straight face



	Material	Tungsten carbide	Tungsten carbide
	Shaft	Ø 2.35 mm short	Ø 3.00 mm short
conical 2°	**REF**	**N186 2H 23**	**N186 3H 23**
	ISO No.	500 103 186 103 023	500 123 186 103 023
conical 4°	**REF**	**N186 2H 31**	**N186 3H 31**
	ISO No.	500 103 186 103 031	500 123 186 103 031
conical 6°	**REF**	**N186 2H 40**	**N186 3H 40**
	ISO No.	500 103 186 103 040	500 123 186 103 040

working speed of non-precious metal 20,000 - 25,000 rpm

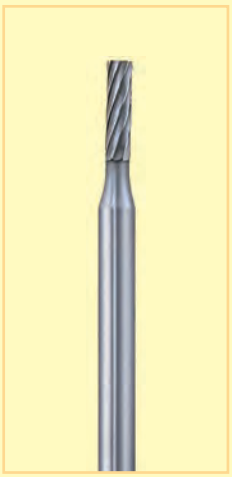
total length 32 mm

A rich quantity of milling and drilling oil is applied onto the milling surface and a speed of 20,000 - 25,000 rpm is used for milling. Whilst adding a copious quantity of milling and drilling oil, the milling surface is prepolished with the polishing bur at 20,000 rpm and then polished to high lustre at 10,000 rpm.

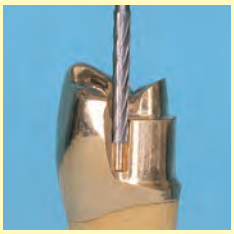


Milling and drilling oil
see page 449
REF 550 0000 8

Groove bur



Material	Tungsten carbide	Tungsten carbide
Shaft	Ø 2.35 mm short	Ø 3.00 mm short
REF	**F538 2H 07**	**F538 3H 07**
ISO No.	500 103 538175 007	500 123 538175 007
REF	**F538 2H 10**	**F538 3H 10**
ISO No.	500 103 538175 010	500 123 538175 010
REF	**F538 2H 12**	**F538 3H 12**
ISO No.	500 103 538175 012	500 123 538175 012
REF	**F538 2H 15**	**F538 3H 15**
ISO No.	500 103 538175 015	500 123 538175 015
REF	**F538 2H 20**	**F538 3H 20**
ISO No.	500 103 538175 020	500 123 538175 020
working speed on precious metal		15,000 - 20,000 rpm
total length: 34 mm		



The groove bur F538 3H 10 exclusively serves to prepare grooves. For this purpose the groove bur is only moved up and down in the vertical axis. The cut on the face simplifies extending the grooves to the cervical direction. At speeds of 15.000 - 20,000 rpm a fine cutting performance and a mirror-like high lustre on the milling surface are obtained.

Shoulder bur



Material	Tungsten carbide	Tungsten carbide
Shaft	Ø 2.35 mm short	Ø 3.00 mm short
REF	**F205 2H 27**	**F205 3H 27**
ISO No.	500 103 205175 027	500 123 205175 027
REF	**F205 2H 29**	**F205 3H 29**
ISO No.	500 103 205175 029	500 123 205175 029
working speed on precious metal		15,000 - 20,000 rpm
total length: 34 mm		



The occlusal shoulder is prepared with a special shoulder bur. The shoulder bur features a face cut which smoothens the bottom of the shoulder. Optimum use of this tool is ensured at speeds of approx. 15.000 – 20,000 rpm. A mirror-like lustre on the milling surface is achieved with the relief cut. Additional polishing is not required.

Milling and drilling oil



Milling and drilling oil
REF 550 0000 8

The milling and drilling oil was especially developed to be used with the milling and drilling tools by bredent. The special consistency produces a reliable oil film between the metal and the drill so that the metal swarf slides out of the cut sections of the tool. This way the cutting performance and the service life of the milling tools are increased. Gumming of the milling and drilling oil is excluded thanks to the high evaporation temperature.

Use:
Always add sufficient quantities of milling and drilling oil during centring, drilling resp. milling.

Wax burs 0°, 1°, 2°, 4°, 6°



Material	Tungsten carbide	
Shaft	Ø 2.35 mm short	
 parallel 0°	REF	F137 2W 10
	ISO No.	500 103 137366 010
 parallel 0°	REF	F137 2W 15
	ISO No.	500 103 137366 015
 parallel 0°	REF	F137 2W 23
	ISO No.	500 103 137366 023
 konisch 1°	REF	F200 2W 29
	ISO No.	500 103 200362 029
 conical 2°	REF	F200 2W 23
	ISO No.	500 103 200362 023
 conical 4°	REF	F200 2W 31
	ISO No.	500 103 200362 031
 conical 6°	REF	F200 2W 40
	ISO No.	500 103 200362 040
working speed on wax	2,500 - 5,000 rpm	

The new 1° wax burs are perfectly suitable for primary conical crowns with a slightly conical angle which are to provide maximum friction below a 0° telescopic crown.
Perfectly suited for electroplating.

Cross-cut burs



Material	Tungsten carbide	
Shaft	Ø 2.35 mm short	
 parallel 0°	REF	F 137 2K 10
	ISO No.	500 103 137190 010
 parallel 0°	REF	F 137 2K 15
	ISO No.	500 103 137190 015
 parallel 0°	REF	F 137 2K 23
	ISO No.	500 103 137190 023
working speed on precious metal	20,000 rpm	

Thanks to the cross cut, high abrasive capacity is achieved to allow quick processing of precious and non-precious metals and titanium.



Material	Tungsten carbide	
Shaft	Ø 2.35 mm short	
 conical 1°	REF	F 200 2K 29
	ISO No.	500 103 200190 029
 conical	REF	F 200 2K 23
	ISO No.	500 103 200190 023
 conical 4°	REF	F 200 2K 31
	ISO No.	500 103 200190 031
 conical 6°	REF	F 200 2K 40
	ISO No.	500 103 200190 040
working speed on precious metal	20,000 rpm	

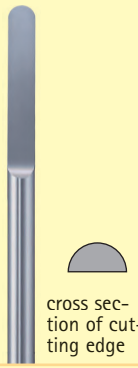
When using milling and drilling oil, the milled surfaces can be shaped with the same bur and using lower pressure just like with a relief bur. Smooth surfaces can be achieved with the same bur without changing the bur.



Milling and drilling oil
see page 449
REF 550 0000 8

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Wax bur, straight cutting edge, parallel, round face





REF	**320 0083 0**
ISO No.	330 103 137382 007
Diameter	0.7 mm



REF	**320 0084 0**
ISO No.	330 103 137382 010
Diameter	1.0 mm



REF	**320 0085 0**
ISO No.	330 103 137382 012
Diameter	1.2 mm



REF	**320 0088 0**
ISO No.	330 103 137382 023
Diameter	2.3 mm

Working speed on wax 5,000 rpm

Assortment
4 pieces, 1 piece each
REF 320 0087 0

All tools feature a total tool length of 36 mm and a shaft diameter of 2.35 mm.

Diamond grinding tool, coarse grain, parallel, round face





REF	**340 0083 G**
ISO No.	806 103 137534 010
Diameter	1.0 mm



REF	**340 0084 G**
ISO No.	806 103 137534 012
Diameter	1.2 mm



REF	**340 0085 G**
ISO No.	806 103 137534 015
Diameter	1.5 mm



REF	**340 0086 G**
ISO No.	806 103 137534 019
Diameter	1.9 mm



REF	**340 0087 G**
ISO No.	806 103 137534 023
Diameter	2.3 mm

Working speed on CrCo/NPM 10,000 - 20,000 rpm

All tools feature a total tool length of 36 mm and a shaft diameter of 2.35 mm.

The radius of the face of the parallel diamond grinding tool has been matched with the face of the parallel wax burs shown above. The use of diamond grinding tools ensures efficient surface working especially on hard alloys.

Diamond grinding tool, fine grain, parallel, round face





REF	**340 0083 F**
ISO No.	806 103 137524 010
Diameter	1.0 mm



REF	**340 0084 F**
ISO No.	806 103 137524 012
Diameter	1.2 mm



REF	**340 0085 F**
ISO No.	806 103 137524 015
Diameter	1.5 mm



REF	**340 0086 F**
ISO No.	806 103 137524 019
Diameter	1.9 mm



REF	**340 0087 F**
ISO No.	806 103 137524 023
Diameter	2.3 mm

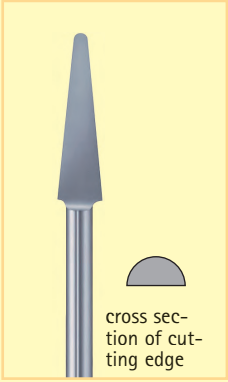
Working speed on CrCo/NPM 10,000 - 20,000 rpm

If correct usage is ensured, the diamond grinding tools offer high dimensional stability, functionality and edge life thanks to galvanic diamond coating

All tools feature a total tool length of 36 mm and a shaft diameter of 2.35 mm.

Wax burs and diamond grinding tools, conical

Wax bur, straight cutting edge, conical, round face



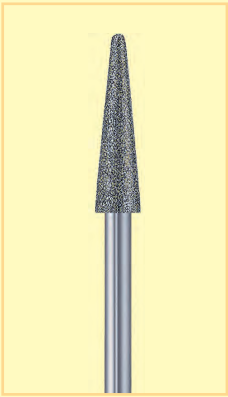
conical 2°	REF	**320 0080 2**
	ISO No.	330 103 200382 023
conical 4°	REF	**320 0081 4**
	ISO No.	330 103 200382 031
conical 6°	REF	**320 0082 6**
	ISO No.	330 103 200382 040

working speed on wax 5,000 rpm

Assortment
3 pieces, 1 piece each
REF 320 0086 0

All tools feature a total tool length of 36 mm and a shaft diameter of 2.35 mm.

Diamond grinding tool, coarse grain, conical, round face



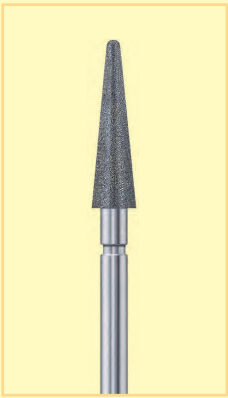
conical 2°	REF	**340 0088 G**
	ISO No.	806 103 200534 023
conical 4°	REF	**340 0089 G**
	ISO No.	806 103 200534 031
conical 6°	REF	**340 0090 G**
	ISO No.	806 103 200534 040

Working speed on CrCo/NPM
10,000 - 20,000 rpm

All tools feature a total tool length of 36 mm and a shaft diameter of 2.35 mm.

The radius of the face of the parallel diamond grinding tool has been matched with the face of the parallel wax burs shown above. The use of diamond grinding tools ensures efficient surface preparation especially on hard alloys.

Diamond grinding tool, fine grain, conical, round face



conical 2°	REF	**340 0088 F**
	ISO No.	806 103 200524 023
conical 4°	REF	**340 0089 F**
	ISO No.	806 103 200524 031
conical 6°	REF	**340 0090 F**
	ISO No.	806 103 200524 040

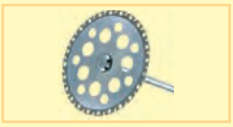
Working speed on CrCo/NPM
10,000 - 20,000 rpm

If correct usage is ensured, the diamond grinding tools offer high dimensional stability, functionality and edge life thanks to galvanic diamond coating.

All tools feature a total tool length of 36 mm and a shaft diameter of 2.35 mm.

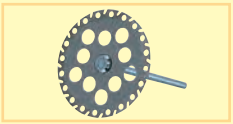
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Giflex-TR



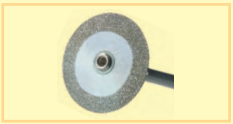
Time-saving through more rapid and more precise separation of the saw models than is possible with a hand saw.

Giflex-TR Master x-tray



Special diamond disc for processing acrylics.

Diamond grinding wheels



Small diameters, for reliable and specific grinding.

Ceraflex



Diagonal toothing and abrasive diamond for a high cutting efficiency.

Microflex



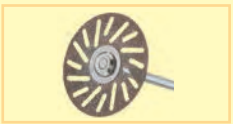
The thinnest diamond grinding wheel coated on both sides – only 0.08 mm thick.

Transflex-T



The highly flexible grinding wheel with transparency for safe, concerted grinding.

Transflex



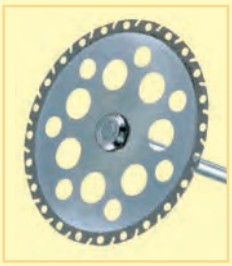
Diagonally arranged cutouts for running transparency with high breaking strength and optimal grinding capacity.

Ultraflex, Superflex, Flexibel, Elastisch



Special diamond graining in various thicknesses and coatings – the right diamond grinding wheel for every area of application.

Giflex-TR



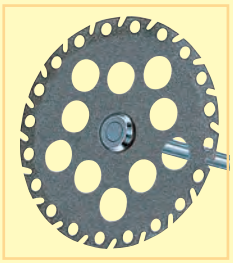
Time-saving through more rapid and more precise separation of the saw models than is possible with a hand saw.

Thickness:	**0.30 mm**
Coating:	on both sides
Version:	mounted
Ø 25 mm	
REF	**340 0002 5**
Ø 30 mm	
REF	**340 0012 0**
Ø 37 mm	
REF	**340 0002 0**
Ø 45 mm	
REF	**340 0011 0**



Due to the wide application range of the Giflex-TR it is possible to the separate the arch from the basal direction if preparation margins are close to the each other. The segmented design of the Giflex-TR allows rapid removal of grinding dust so that jamming of the disc is avoided.

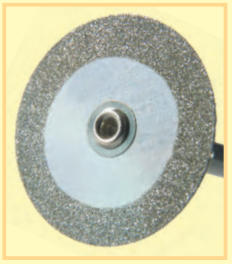
Giflex-TR Master x-tray



Thickness:	**0.40 mm**
Coating:	on both sides
Version:	mounted
Ø 25 mm	
REF	**340 00M2 5**

Special diamond disc for processing acrylics.
Giflex-TR Master x-tray features a coarse diamond grit; accordingly, a cooling effect is achieved already in the diamond-coated area when separating acrylics.

Diamond mini



Small diameters, for reliable and specific grinding.

Thickness:	**0.23 mm**
Coating:	on both sides
Version:	mounted
Ø 8 mm	
REF	**340 0014 3**
Ø 10 mm	
REF	**340 0014 4**
Ø 12 mm	
REF	**340 0014 5**
Ø 14 mm	
REF	**340 0014 6**



The small diameter is particularly suitable for finishing interdental spaces of ceramically veneered bridges.

bredent group

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Ceraflex



Diagonal toothing and abrasive diamond for a high cutting efficiency. The cooling effect of the saw toothing with the abrasive diamond graining creates ideal conditions for rapid, concerted finishing of synthetic and ceramic veneers.

Thickness:	**0.25 mm**
Coating:	on both sides
Version:	mounted
Ø 16 mm	
REF	**340 0013 0**
Ø 22 mm	
REF	**340 0003 0**



As a result of its cooling effect, Ceraflex is particularly well suited for finishing composites and other synthetic materials.

Microflex



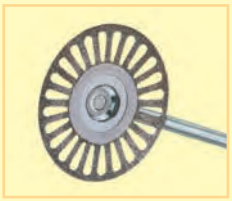
The thinnest diamond grinding wheel coated on both sides – only 0.08 mm thick. The flexibility and thin structure of Microflex allow very fine separation in the anterior and posterior area.

Thickness:	**0.08 mm**
Coating:	on both sides
Version:	mounted
Ø 12 mm	
REF	**340 0014 2**
Ø 16 mm	
REF	**340 0014 1**
Ø 22 mm	
REF	**340 0014 0**



Very thin incisions create natural vividness in the veneering technique.

Transflex-T



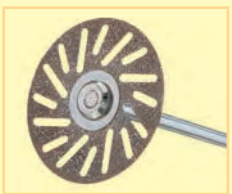
The longish cutouts in the grinding wheel ensure cooling, high flexibility and maximum running transparency. This permits working in a way which is gentle on materials, clear and targeted and allows to save time.

Thickness:	**0.20 mm**	**0.20 mm**	**0.25 mm**
Coating:	on one side	on one side	on both sides
Version:	outer coating	inner coating	mounted
Ø 16 mm			
REF			**340 0010 0**
Ø 22 mm			
REF	**340 0008 0**	**340 0009 0**	**340 0007 0**



The special arrangement of the longish cutouts makes the rotating grinding wheel transparent. Being able to see the area of application during grinding is a considerable advantage.

Transflex



Diagonally arranged cutouts for running transparency with high breaking strength and optimal grinding capacity. Transflex is particularly well suited for diving and separating in the areas of the front and side teeth and in approximate shaping.

Thickness:	**0.20 mm**	**0.20 mm**	**0.25 mm**
Coating:	on one side	on one side	on both sides
Version:	outer coating	inner coating	mounted
Ø 22 mm			
REF	**340 0005 0**	**340 0006 0**	**340 0004 0**



The specially diagonally arraned cutouts ensure running transparency with high stability and abrasiveness of the grinding wheel.

Ultraflex, Superflex, Flexibel, Elastisch

Special diamond graining in various thicknesses and coatings - the right diamond grinding wheel for every area of application.



Ultraflex

Thickness:		0.10 mm on one side		0.15 mm on both sides	
Coating:		outer coating	inner coating		
Version:	non-mounted			non-mounted	mounted
Ø 19 mm					
REF	340 0034 0		340 0046 0	340 0027 9	340 0050 0
Ø 22 mm					
REF	340 0035 0		340 0058 0	340 0027 8	340 0062 0

Superflex

Thickness:		0.13 mm on one side		0.20 mm on both sides	
Coating:		outer coating	inner coating		
Version:	non-mounted			non-mounted	mounted
Ø 19 mm					
REF	340 0036 0	340 0043 0	340 0047 0	340 0028 0	340 0051 0
Ø 22 mm					
REF	340 0037 0	340 0055 0	340 0059 0	340 0029 0	340 0063 0

Flexibel

Thickness:		0.15 mm on one side		0.23 mm on both sides	
Coating:		outer coating	inner coating		
Version:	non-mounted			non-mounted	mounted
Ø 19 mm					
REF	340 0038 0	340 0044 0	340 0048 0	340 0030 0	340 0052 0
Ø 22 mm					
REF	340 0039 0	340 0056 0	340 0060 0	340 0031 0	340 0064 0

Elastisch

Thickness:		0.17 mm on one side		0.25 mm on both sides	
Coating:		outer coating	inner coating		
Version:	non-mounted			non-mounted	mounted
Ø 19 mm					
REF	340 0040 0	340 0045 0	340 0049 0	340 0032 0	340 0053 0
Ø 22 mm					
REF	340 0041 0	340 0057 0	340 0061 0	340 0033 0	340 0065 0

Diacryl Grinding Instruments dcs



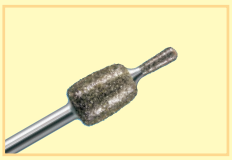
Save time and improve quality by grinding acrylic with diamond coated Diacryl rotating instruments.

Diagen-Turbo-Grinder dtg



The diamond grinder system with the extraordinary grinding properties due to special Diagen diamond binding material.

Set-up grinding tool



**Two grinding tools in one.
Grinding without exchanging tools in a single working step.**

Special Diamonds for the Veneering Technique



Perfect finishing of acrylic and ceramic veneers.

Diamond grinding tool dsl



The all-rounder among diamond grinding tools, available in the most common shapes.

FG-Diabolo



Economic system of grinding tools with razor sharp diamonds, self-regenerating grit and extended durability.

Diacryl Grinding Instruments dcs



Save time and improve quality by grinding acrylic with diamond coated Diacryl rotary instruments.
Thanks to their uniform, coarse grit diamond particles with sharp edges and thei r specific shapes, Diacryl diamond instruments are excellent for trimming acrylic dentures quickly and accurately.



Coarse diamond instrument
REF 340 0103 0



Universal diamond instrument
REF 340 0104 0



Papillae diamond instrument
REF 340 0105 0



Round diamond instrument for peripheries
REF 340 0106 0



Round diamond instrument for peripheries
REF 340 0102 0



Rubber grinder
REF 340 0090 0



Assortment

6 pieces, 1 piece each
REF 340 0107 0





Thanks to their extra coarse diamond grit and large diameter, these instruments grind aggressively and create a perfectly ground surface. They are perfect for reducing large areas of acrylic. Their hollow shape enables them to be used at high speeds, with maximum cooling effect.





Can be used in lingual and palatal areas, as required. For grinding large papillae and root attachment or lingual bars.





The pointed flame shape permits the papillae and alveolar attachments to be ground interdentally.





Thanks to the tapered central section of the instrument, uniformly thick peripheries can be created easily and quickly on functional impression trays and partial dentures. Acrylic beads and rough areas on the fitting surface of the denture are easily removed with the round head of the instrument.





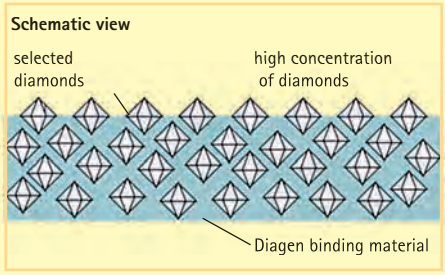
Narrow frenae can be rounded and perfected with this Diacryl instrument.



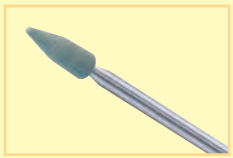


This abrasive rubber instrument creates smooth surfaces on acrylic dentures instead of using sandpaper. Thanks to the smooth surfaces, the denture can be prepared for optimum polishing in the shortest possible time.

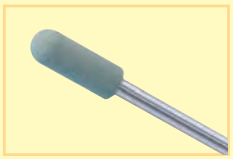
Diagen-Turbo-Grinder, fine



The diamond grinder system with the extraordinary grinding properties due to special Diagen diamond binding material.
Maximum grinding power and abrasive capacity on metal and ceramic surfaces at reduced pressure. Increased service life compared to conventional binding material allows a wide range of applications and thus high efficiency.



Cylinder, pointed
Ø 3.5 x 11 mm, 2 pcs
REF 340 0015 5



Cylinder, round
Ø 4.5 x 13 mm, 2 pcs
REF 340 0016 5



Cone
Ø 3.5 x 11 mm
2 pieces
REF 340 0015 0



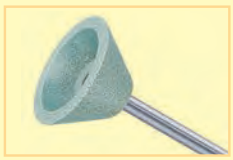
Cylinder
Ø 4.8 x 13 mm
2 pieces
REF 340 0016 0



Cylinder
Ø 6.5 x 13 mm
2 pieces
REF 340 0017 0



Inverted cone with recess
Ø 6 x 8 mm
1 piece
REF 340 0025 0



Inverted cone with recess
Ø 12 x 6 mm
1 piece
REF 340 0024 0



Lens
Ø 22 x 2 mm
1 piece
REF 340 0021 0



Disc
Ø 22 x 2 mm
1 piece
REF 340 0022 0



Disc
Ø 15 x 3,5 mm,
2 pieces
REF 340 0018 0



Disc
Ø 22 x 4,5 mm,
1 piece
REF 340 0019 0



Assortment

5 pieces, 1 piece each
Diagen-Turbo-Grinder
REF 340 0020 0



Assortment

5 pieces, 1 piece each
Diagen-Turbo-Grinder ceramic
REF 340 0020 5



Non-precious and precious metal alloys
Gentle and pressure-free grinding allows perfect finishing and efficient removal of material.



Non-precious and precious metal alloys
The dtg grinders are perfectly suitable for processing of metal surfaces of ceramic frameworks thanks to the diamond coating.



Ceramic and resins
The grinder system is perfectly suitable for processing of ceramic due to grinding at reduced heat and extensive removal of material.

Ideal for processing zirconium oxide – recommended by leading implant manufacturers



The cylindrical shape is perfectly suitable for parallel processing.



The inverted cone with recess provides a cooling effect and thus the perfect precondition for processing zirconium oxide.



Thanks to their diamond coating, Diagen-Turbo-Grinders represent the ideal tools for processing materials such as glass ceramic or zirconium oxide.



Rapid and convenient shaping of implant suprastructures. The fine diamond particles produce a smooth surface.

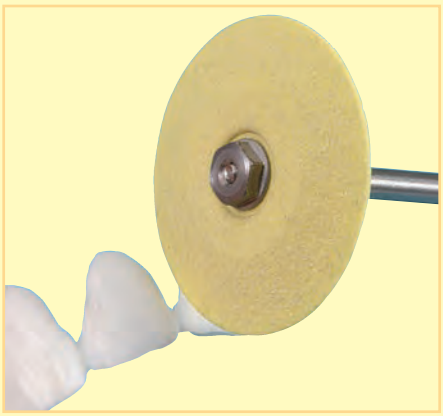


The variety of different shapes allow to obtain a wide indication range.



Extremely hard alloys and ceramic materials can be processed as easily as gold.

Diagen-Turbo-Grinder, coarse



Diagen-Turbo-Grinder, coarse – new quality of the Diagen binding with coarse diamond grains for quick preparation.

- two abrasion levels for more flexibility in the usage
- special binding material (coarse) for longer tool life (20 %) and reduced consumption of grinders
- cooling effect avoids damage to the zirconium
- 11 different shapes for all applications ensure perfect processing results
- can be used for zirconium, ceramic and metal
- continuously exposed diamonds guarantee fast removal of material
- recommended by leading zirconium and ceramic manufacturers; *
  to make sure that the right decision has been made *

New shapes:

- Cylinder, pointed, for easy accesss to narrow areas
- Cylinder, round, for finishing chamfers

* The companies Ivoclar Vivadent, Vita und Teamziereis recommend the Diagen-Turbo-Grinders for processing zirconium and ceramic.

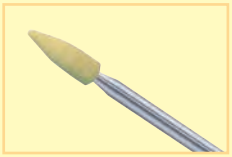
Comparison of microsection Zirconium



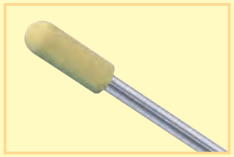
New shapes in additional abrasion level.
Fast removal thanks to coarse diamond grain and special diamond binding material.
Surface roughness: 26 µm



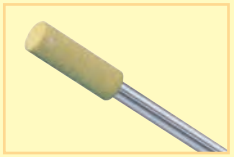
New shapes in proven quality.
Smoothening of surfaces and finishing with fine diamond grain:
Surface roughness 2 µm



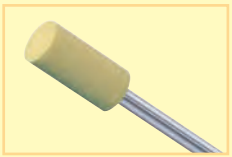
Cylinder, pointed
Ø 3.5 x 11 mm
2 pcs
REF 340 G015 5



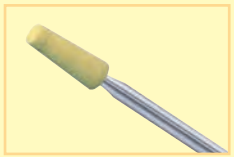
Cylinder, round
Ø 4.5 x 13 mm
2 pcs
REF 340 G016 5



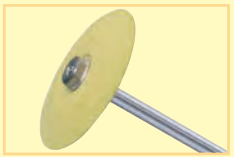
Cylinder
Ø 4.5 x 13 mm
2 pcs
REF 340 G016 0



Cylinder
Ø 6.0 x 13 mm
2 pcs
REF 340 G017 0



Cone
Ø 3.5 x 11 mm
2 pcs
REF 340 G015 0



Cone
Ø 3.5 x 11 mm
2 pcs
REF 340 G015 0



Quick finishing of closely positioned crowns with the pointed cylinder saves time.



Processing without pressure and simultaneous cooling due to the diagen binding material avoid damage to the zirconium.



The round shape facilitates finishing of chamfers for individual abutments. This way the time for finishing is reduced and the efficiency is increased.



The unique diamond binding material ensures longer tool life and the coarser diamond grain facilitates efficient processing.



The coarse diamond grain leads to fast removal of material and reworking with the fine Diagen-Turbo-Grinder produces perfect surfaces. Ideal for processing IPS e.max.

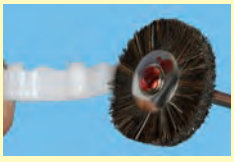


Accurate finishing in the shoulder area with the fine Diagen-Turbo-Grinder for precise restorations made of press ceramic, layering ceramic or zirconium. A perfect surface for subsequent polishing with Zi-polish is obtained.

Accessories:



***Zi*-polish**
5 g
REF 360 1002 5



The abrasive polishing paste *Zi*-polish in combination with the Rodeo round brush produces a perfect high luster on zirconium surfaces in a shorter time.

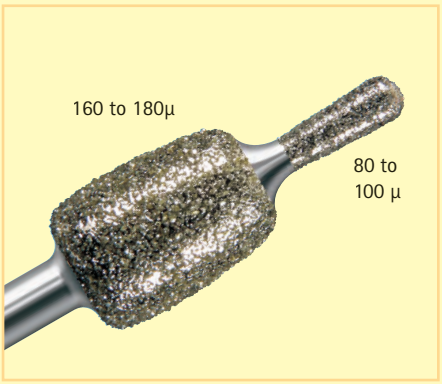
Set-up grinding tool



Set-up grinding tool
1 piece
REF 340 0101 0

Two grinding tools in one.
Grinding without exchanging tools in a single working step.
- quick adaptation of the underside of the tooth to be set up
- grinding in of occlusal stops

Two grinding tools in one



occlusal



The small, precisely shaped grinding tip with fine, perfectly cutting diamond grains provides the ideal precondition for well-aimed and rapid grinding in of occlusal contacts.

basal



The large grinding area with its optimized shape and selected natural abrasive diamonds ensures maximum removal of material and thus accurate and quick grinding.

Special Diamonds for the Veneering Technique





Diamond grinding tool for veneering techniques Vb 1
1 piece
REF 340 0084 0
ISO No. 806 104 033524 029

Perfect finishing of acrylic and ceramic veneers.



The concave part of this tool ensures perfect contouring of the approximal surfaces in the area of the neck of the tooth. Enhanced aesthetics in reduced time.





Diamond grinding tool for veneering techniques Vb 2
1 piece
REF 340 0083 0
ISO No. 806 104 000524 032



The very thin tip of this tool allows to design tooth necks of single crowns and bridges in an efficient way.





Diamond grinding tool for veneering techniques Vb 3
1 piece
REF 340 0085 0
ISO No. 806 104 171524 033



In a very simple way this tool creates uniform enamel bulges at the tooth neck. All tools can be used on ceramic and acrylic veneering materials.



The conical grinding tool with coated face provides a universal application range. The entire process of contouring can be carried out with this tool.

Diamond grinding tool dsl














Designation	REF	Supply form	Order quantity
KA 4,0	340 0070 0	1 piece	
KA 2,5	340 0071 0	1 piece	
KI 2,5	340 0072 0	1 piece	
SR 1,0	340 0073 0	1 piece	
KF 0,5	340 0074 0	1 piece	
KS 2,0	340 0075 0	1 piece	
KS 1,5	340 0076 0	1 piece	
RU 2,0	340 0077 0	1 piece	
RU 1,5	340 0078 0	1 piece	
RU 1,0	340 0079 0	1 piece	
LZ 2,0	340 0080 0	1 piece	
LZ 1,5	340 0081 0	1 piece	

Sender (stamp):

Customer No.

Date, signature

Additional order

bredent group

Telephone (+49) 0 73 09 / 8 72-4 40

Diabolo



Economic system of grinding tools with razor sharp diamonds, self-regenerating grit and extended durability.



Thanks to embedding the diamond crystals in a special mixture of binding material ceramic surfaces can be processed without leaving any residues.



The variety of shapes of the Diabolo tools offers an individual range for each surface type and all dental materials.



The outstanding hardness of the sintered diamonds allows particularly efficient use and material removal for resistant materials through self-sharpening diamond crystals.



The Diabolo sintered diamond tools ensure reliable and efficient processing of sensitive areas down to the last diamond grain.

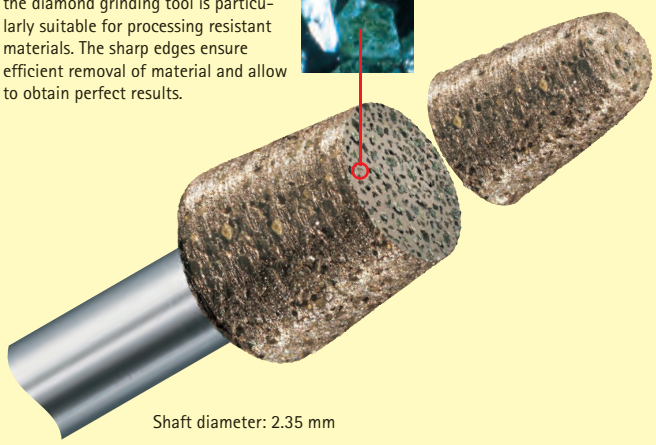


Various materials can be processed with a Diabolo diamond grinding tool without time-consuming, repeated exchanging of tools.

Sintered diamond grinding tools

Owing to the tremendous hardness, the diamond grinding tool is particularly suitable for processing resistant materials. The sharp edges ensure efficient removal of material and allow to obtain perfect results.





Shaft diameter: 2.35 mm

The superior class of diamond grinding tools. For fast and efficient processing of extremely hard dental materials.
Carefully selected natural diamonds are entirely integrated into a mixture of metal and binding material designed for the individual application.
Due to the special manufacturing process worne out diamond grit is automatically removed and replaced by razor sharp diamond crystals so that automatic sharpening is achieved.
The range of different shapes ensures individual selection and permits the use for numerous applications.
The self-sharpening effect allows to perform highly difficult processing of dental material in a simple, fast and efficient way.

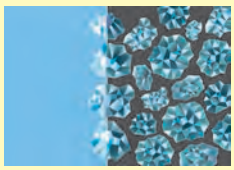
Schematic comparison of electroplated and sintered diamond grinding tools:

In the case of electroplated grinding tools, the diamond crystals have been attached to the bur blank in a metal bond.

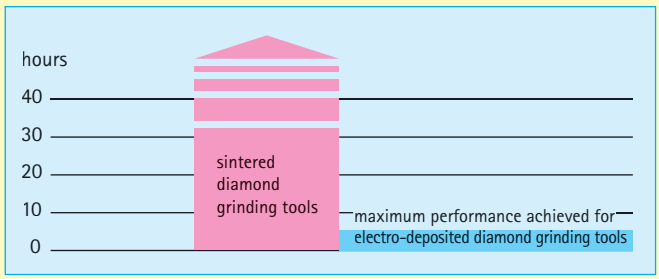


Diamond crystals in an electro-deposited metal bond.

In the bredent sintering method the razor sharp diamond crystals are embedded in an adapted mixture of binding material.



Diamond crystals embedded in a special mixture of binding material.

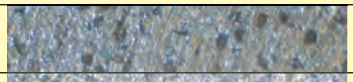


Summary: When comparing sintered/electroplated diamond grinding tools in the long-term test, the bredent Diabolo tools excelled by their efficiency and extended service life. Due to the self-sharpening effect of the diamond crystals, the sintered diamond tools feature high cutting performance and ensure perfect removal of material until the end of service life.

Diabolo

Color coding

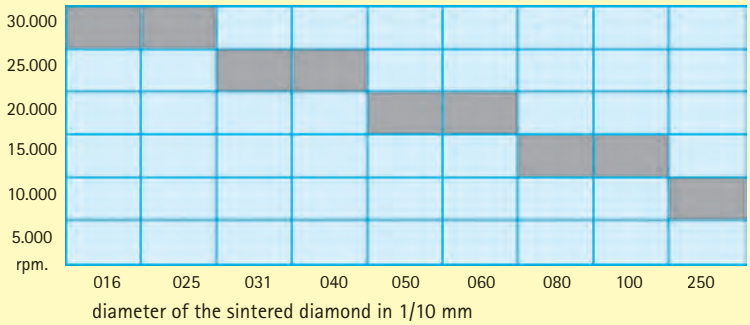
Diabolo grinding tools feature color coding.
This system indicates the different grit size of the grinding tool and thus simplifies the selection of the suitable tool.

Color coding	Grit size	Grit area	Marking
	200 µm		extra coarse / black
	130 µm		coarse/ green
	100 µm		normal
	80 µm		fine / red

Work recommendations

Always adapt speed and pressure (approx. 0.3 - 2N) to the material to be processed.

Recommended speed



Order Number

To simplify reordering, the order number of the respective Diabolo grinding tool is engraved on the shaft.

Razor sharp:
Diabolo diamond crystals constantly form new cutting edges during grinding. This way extremely high resistance and extended service life are ensured.

The color code:
From fine to extra coarse grit - at a single glance!
A separate color for each of the four grit sizes ensures that you select the correct Diabolo. Simple selection of the desired grit size with the help of the color rings.

Order number:
The order number is included on the shaft of every tool to exclude errors when ordering.



SF = Sintered diamond, fine
199 = shape of the working tip (C)
050 = largest diameter of the working tip (E)

Precise:
Every Diabolo sintered diamond is absolutely concentric and therefore wears down evenly. Accordingly, restorations fit precisely. This even applies to complex milling of non-precious metal objects.

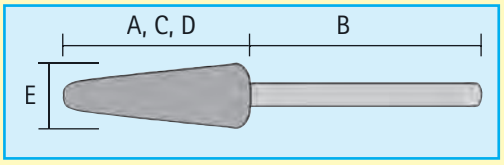
Guaranteed bredent quality:
Every sintered diamond undergoes the bredent quality assurance test. We guarantee optimum, uniform cutting performance right down to the last particle of diamond.

Very easily changed:
Diabolo sintered diamonds feature rounded ends on their shafts so that they can be inserted quickly into any handpiece.

ISO number

ISO numbers are indicated for all tools to ensure enhanced comparability.
These internationally standardized numbers feature 15 digits. The numbers include the following information:

Diagram Grinding tool



A
1. - 3. digit:
Material of the working tip

C
7. - 9. digit:
Shape of the working tip

E
13. - 15. digit:
Diameter of the working tip

807 104 199513 050

B
4. - 6. digit:
Shaft type

D
10. - 12. digit:
Grit size

bredent group
Telephone (+49) 0 73 09 / 8 72-4 40

Diabolo

Conical, pointed



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF	SS 165 023	SG 165 023	SN 165 023	SF 165 023
ISO No.	807 104 165543 023	807 104 165533 023	807 104 165523 023	807 104 165513 023
REF	SS 167 050	SG 167 050	SN 167 050	SF 167 050
ISO No.	807 104 167543 050	807 104 167533 050	807 104 167523 050	807 104 167513 050
REF	SS 213 016	SG 213 016	SN 213 016	SF 213 016
ISO No.	807 104 213543 016	807 104 213533 016	807 104 213523 016	807 104 213513 016
REF	SS 213 031	SG 213 031	SN 213 031	SF 213 031
ISO No.	807 104 213543 031	807 104 213533 031	807 104 213523 031	807 104 213513 031

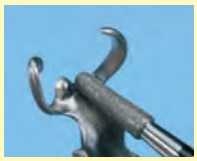


Highly accurate shaping of occulusal surfaces of ceramic veneers.

Conical, round



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF	SS 198 025	SG 198 025	SN 198 025	SF 198 025
ISO No.	807 104 198543 025	807 104 198533 025	807 104 198523 025	807 104 198513 025
REF	SS 198 037	SG 198 037	SN 198 037	SF 198 037
ISO No.	807 104 198543 037	807 104 198533 037	807 104 198523 037	807 104 198513 037
REF	SS 199 031	SG 199 031	SN 199 031	SF 199 031
ISO No.	807 104 199543 031	807 104 199533 031	807 104 199523 031	807 104 199513 031
REF	SS 199 040	SG 199 040	SN 199 040	SF 199 040
ISO No.	807 104 199543 040	807 104 199533 040	807 104 199523 040	807 104 199513 040
REF	SS 199 050	SG 199 050	SN 199 050	SF 199 050
ISO No.	807 104 199543 050	807 104 199533 050	807 104 199523 050	807 104 199513 050



Grinding the inside of chrome cobalt clasps.

Conical



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF	SS 171 016	SG 171 016	SN 171 016	SF 171 016
ISO No.	807 104 171543 016	807 104 171533 016	807 104 171523 016	807 104 171513 016
REF	SS 171 031	SG 171 031	SN 171 031	SF 171 031
ISO No.	807 104 171543 031	807 104 171533 031	807 104 171523 031	807 104 171513 031
REF	SS 172 031	SG 172 031	SN 172 031	SF 172 031
ISO No.	807 104 172543 031	807 104 172533 031	807 104 172523 031	807 104 172513 031
REF	SS 173 031	SG 173 031	SN 173 031	SF 173 031
ISO No.	807 104 173543 031	807 104 173533 031	807 104 173523 031	807 104 173513 031
REF	SS 173 040	SG 173 040	SN 173 040	SF 173 040
ISO No.	807 104 173543 040	807 104 173533 040	807 104 173523 040	807 104 173513 040
REF	SS 173 050	SG 173 050	SN 173 050	SF 173 050
ISO No.	807 104 173543 050	807 104 173533 050	807 104 173523 050	807 104 173513 050



Removing sharp edges and flattening of retention beads.

Bud, round



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF	SS 261 050	SG 261 050	SN 261 050	SF 261 050
ISO No.	807 104 261543 050	807 104 261533 050	807 104 261523 050	807 104 261513 050
REF	SS 263 050	SG 263 050	SN 263 050	SF 263 050
ISO No.	807 104 263543 050	807 104 263533 050	807 104 263523 050	807 104 263513 050



Smoothing of the sublingual bar.

Bud



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF	SS 254 060	SG 254 060	SN 254 060	SF 254 060
ISO No.	807 104 254543 060	807 104 254533 060	807 104 254523 060	807 104 254513 060



Grinding the retention area of chrome cobalt objects.

Diabolo

Bud, slender



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF				SF 257 031
ISO No.				807 104 257513 031



Grinding the surface of all-ceramic frameworks and veneering ceramic.

Cylinder, flame-shaped



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF	SS 249 025	SG 249 025	SN 249 025	SF 249 025
ISO No.	807 104 249543 025	807 104 249533 025	807 104 249523 025	807 104 249513 025
REF	SS 250 016	SG 250 016	SN 250 016	SF 250 016
ISO No.	807 104 250543 016	807 104 250533 016	807 104 250523 016	807 104 250513 016
REF	SS 250 031	SG 250 031	SN 250 031	SF 250 031
ISO No.	807 104 250543 031	807 104 250533 031	807 104 250523 031	807 104 250513 031
REF	SS 251 031	SG 251 031	SN 251 031	SF 251 031
ISO No.	807 104 251543 031	807 104 251533 031	807 104 251523 031	807 104 251513 031



Opening the interdental spaces.

Cylinder, round



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF	SS 141 025	SG 141 025	SN 141 025	SF 141 025
ISO No.	807 104 141543 025	807 104 141533 025	807 104 141523 025	807 104 141513 025
REF	SS 141 031	SG 141 031	SN 141 031	SF 141 031
ISO No.	807 104 141543 031	807 104 141533 031	807 104 141523 031	807 104 141513 031
REF	SS 143 050	SG 143 050	SN 143 050	SF 143 050
ISO No.	807 104 143543 050	807 104 143533 050	807 104 143523 050	807 104 143513 050
REF	SS 143 080	SG 143 080	SN 143 080	SF 143 080
ISO No.	807 104 143543 080	807 104 143533 080	807 104 143523 080	807 104 143513 080
REF	SS 153 016	SG 153 016	SN 153 016	SF 153 016
ISO No.	807 104 153543 016	807 104 153533 016	807 104 153523 016	807 104 153513 016
REF	SS 153 031	SG 153 031	SN 153 031	SF 153 031
ISO No.	807 104 153543 031	807 104 153533 031	807 104 153523 031	807 104 153513 031



Cervical finishing of veneering ceramic.

Cylinder, pointed



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF	SS 131 016	SG 131 016	SN 131 016	SF 131 016
ISO No.	807 104 131543 016	807 104 131533 016	807 104 131523 016	807 104 131513 016
REF	SS 131 031	SG 131 031	SN 131 031	SF 131 031
ISO No.	807 104 131543 031	807 104 131533 031	807 104 131523 031	807 104 131513 031



Smoothing the surface structure in the incisal area of ceramic veneers.

bredent group

Diabolo

Cylinder



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF	SS 111 025	SG 111 025	SN 111 025	SF 111 025
ISO No.	807 104 111543 025	807 104 111533 025	807 104 111523 025	807 104 111513 025
REF	SS 111 031	SG 111 031	SN 111 031	SF 111 031
ISO No.	807 104 111543 031	807 104 111533 031	807 104 111523 031	807 104 111513 031
REF	SS 112 016	SG 112 016	SN 112 016	SF 112 016
ISO No.	807 104 112543 016	807 104 112533 016	807 104 112523 016	807 104 112513 016
REF	SS 112 031	SG 112 031	SN 112 031	SF 112 031
ISO No.	807 104 112543 031	807 104 112533 031	807 104 112523 031	807 104 112513 031
REF	SS 113 050	SG 113 050	SN 113 050	SF 113 050
ISO No.	807 104 113543 050	807 104 113533 050	807 104 113523 050	807 104 113513 050



Smoothing of surfaces treated with a solder or laser.

Inverted cone



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF	SS 227 016	SG 227 016	SN 227 016	SF 227 016
ISO No.	807 104 227543 016	807 104 227533 016	807 104 227523 016	807 104 227513 016
REF	SS 227 031	SG 227 031	SN 227 031	SF 227 031
ISO No.	807 104 227543 031	807 104 227533 031	807 104 227523 031	807 104 227513 031



Finishing of deeper surfaces of metal frameworks.

Inverted cone, round



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF	SS 233 016	SG 233 016	SN 233 016	SF 233 016
ISO No.	807 104 233543 016	807 104 233533 016	807 104 233523 016	807 104 233513 016
REF	SS 233 031	SG 233 031	SN 233 031	SF 233 031
ISO No.	807 104 233543 031	807 104 233533 031	807 104 233523 031	807 104 233513 031



Smoothing of chrome cobalt areas difficult to access.

Inverted cone



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF	SS 014 018	SG 014 018	SN 014 018	SF 014 018
ISO No.	807 104 014543 018	807 104 014533 018	807 104 014523 018	807 104 014513 018
REF	SS 014 021	SG 014 021	SN 014 021	SF 014 021
ISO No.	807 104 014543 021	807 104 014533 021	807 104 014523 021	807 104 014513 021
REF	SS 014 050	SG 014 050	SN 014 050	SF 014 050
ISO No.	807 104 014543 050	807 104 014533 050	807 104 014523 050	807 104 014513 050
REF	SS 014 080	SG 014 080	SN 014 080	SF 014 080
ISO No.	807 104 014543 080	807 104 014533 080	807 104 014523 080	807 104 014513 080



Finishing of a precise marginal edge.

Diabolo Cleaner





Diabolo Cleaner
1 piece
REF 340 0100 0

The indispensable tool for removing contaminations so that constant cutting performance of the Diabolo tools is ensured.
Contaminated material is removed easily and quickly and new diamond cutting edges are exposed from the bronze binding material.

Diabolo

Inverted cone with recess



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF				SF 030 012
ISO No.				807 104 030513 012
REF			SN 030 018	SF 030 018
ISO No.			807 104 030523 018	807 104 030513 018
REF	SS 030 025	SG 030 025	SN 030 025	SF 030 025
ISO No.	807 104 030543 025	807 104 030523 025	807 104 030523 025	807 104 030513 025
REF	SS 030 040	SG 030 040	SN 030 040	SF 030 040
ISO No.	807 104 030543 040	807 104 030533 040	807 104 030523 040	807 104 030513 040
REF	SS 030 060	SG 030 060	SN 030 060	SF 030 060
ISO No.	807 104 030543 060	807 104 030533 060	807 104 030523 060	807 104 030513 060



The recess in the middle of the grinding tool ensures the edge stability of the tool during the use.

Round



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF	SS 001 018	SG 001 018	SN 001 018	SF 001 018
ISO No.	807 104 001543 018	807 104 001533 018	807 104 001523 018	807 104 001513 018
REF	SS 001 021	SG 001 021	SN 001 021	SF 001 021
ISO No.	807 104 001543 021	807 104 001533 021	807 104 001523 021	807 104 001513 021
REF	SS 001 040	SG 001 040	SN 001 040	SF 001 040
ISO No.	807 104 001543 040	807 104 001533 040	807 104 001523 040	807 104 001513 040
REF	SS 001 060	SG 001 060	SN 001 060	SF 001 060
ISO No.	807 104 001543 060	807 104 001533 060	807 104 001523 060	807 104 001513 060



Reworking the metal element in the palatal area of chrome cobalt restorations.

Lens

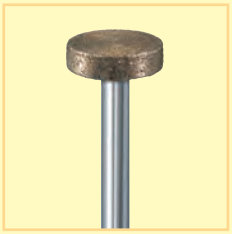


	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF	SS 304 050	SG 304 050	SN 304 050	SF 304 050
ISO No.	807 104 304543 050	807 104 304533 050	807 104 304523 050	807 104 304513 050
REF	SS 304 080	SG 304 080	SN 304 080	SF 304 080
ISO No.	807 104 304543 080	807 104 304533 080	807 104 304523 080	807 104 304513 080
REF	SS 304 120	SG 304 120	SN 304 120	SF 304 120
ISO No.	807 104 304543 120	807 104 304533 120	807 104 304523 120	807 104 304513 120



Preparing a tooth curvature.

Wheel



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF	SS 072 040	SG 072 040	SN 072 040	SF 072 040
ISO No.	807 104 072543 040	807 104 072533 040	807 104 072523 040	807 104 072513 040
REF	SS 072 060	SG 072 060	SN 072 060	SF 072 060
ISO No.	807 104 072543 060	807 104 072533 060	807 104 072523 060	807 104 072513 060
REF	SS 072 080	SG 072 080	SN 072 080	SF 072 080
ISO No.	807 104 072543 080	807 104 072533 080	807 104 072523 080	807 104 072513 080



Distinctive borders of transitions from metal towards the veneering material.

Wheel, rounded edges



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
REF	SS 056 100	SG 056 100	SN 056 100	SF 056 100
ISO No.	807 104 056543 100	807 104 056533 100	807 104 056523 100	807 104 056513 100

Note:
The photos illustrate only one common application field of the grinding tool.

Diabolo

Discs





Separating and grinding back the sprues.

	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
 Ø 25 x 0,4 mm	REF	SS 327 004	SG 327 004	SN 327 004	SF 327 004
	ISO No.	807 104 327543 004	807 104 327533 004	807 104 327523 004	807 104 327513 004
 Ø 25 x 1,0 mm	REF	SS 327 010	SG 327 010	SN 327 010	SF 327 010
	ISO No.	807 104 327543 010	807 104 327533 010	807 104 327523 010	807 104 327513 010
 Ø 25 x 2,8 mm	REF	SS 327 020	SG 327 020	SN 327 020	SF 327 020
	ISO No.	807 104 327543 020	807 104 327533 020	807 104 327523 020	807 104 327513 020
 Ø 25 x 3,0 mm	REF	SS 327 030	SG 327 030	SN 327 030	SF 327 030
	ISO No.	807 104 327543 030	807 104 327533 030	807 104 327523 030	807 104 327513 030
 Ø 7 x 0,4 mm	REF	SS 327 080	SG 327 080	SN 327 080	SF 327 080
	ISO No.	807 104 327543 080	807 104 327533 080	807 104 327523 080	807 104 327513 080

Disc



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
 Ø 15 x 0,2 mm	REF				SF 327 001
	ISO No.				807 104 327513 001

Supra Disc



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
 Ø 20 x 0,2 mm	REF			SN 327 002	SF 327 002
	ISO No.			807 104 327523 002	807 104 327513 002

Duo Disc



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
 Ø 20 x 0,5 mm	REF			SN 327 005	
	ISO No.			807 104 327523 005	

Supra Disc



	extra coarse 200 µm	coarse 130 µm	normal 100 µm	fine 80 µm
 Ø 30 x 0,3 mm	REF			SN 327 003	SF 327 003
	ISO No.			807 104 327523 003	807 104 327513 003



Highly accurate separation and preparation of interdental areas.

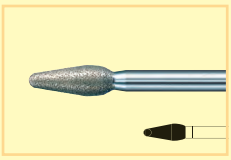
Diabolo

Fast, efficient processing of any type of zirconium oxide and hard dental materials.
Friction grip - first-class diamond grinders. Economic system of grinding tools with razor sharp diamonds, self-regenerating grit and extended durability. FG-Diabolo are sintered diamond grinding tools and are used in the turbine or in the T-handpiece with FG adapter for grinding zirconium oxide and extremely hard materials. FG-Diabolo reduces processing times and renders working processes highly efficient.

FG adapter 1.6 to 2.35
for the use in the handpiece
Pack cont. 10 pieces
REF 340 0100 2
not included in the assortment

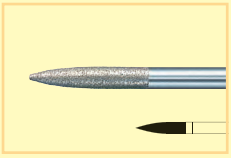
Assortment

6 pieces, 1 piece each
FG-Diabolo, fine grit
Bud, large
Flame
Cylinder, round head
Inverted cone
Torpedo
Bud, small
REF 330 0116 6



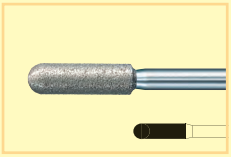
Bud, fine, large
REF FF 263 023





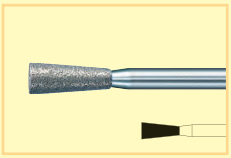
Flame, fine
REF FF 250 016





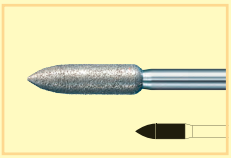
Cylinder, round head fine
REF FF 141 023





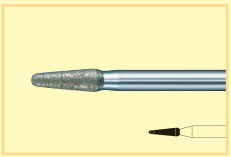
Inverted cone, fine
REF FF 227 023





Torpedo, fine
REF FF 289 023





Bud, fine, small
REF FF 263 014



All the tools you need even when processing zirconium oxide

Indispensable tool for removing contaminations. Diabolo Cleaner guarantees constant cutting performance. Contaminated material is removed easily and quickly and new diamond crystals are exposed from the bronze binding material and integrated into the surface of the tool to enhance the cutting performance and reduce the grinding time.

Leading implant manufacturers recommend Diagen-Turbo-Grinders dtg. These abrasive tools have proved their suitability for reworking sintered zirconium frameworks and minimized the amount of work thanks to the special Diagen diamond binding material.



see also page 284

Sortiment

5 pieces, 1 piece each
Diagen-Turbo-Grinder
REF 340 0020 0

Accessories:



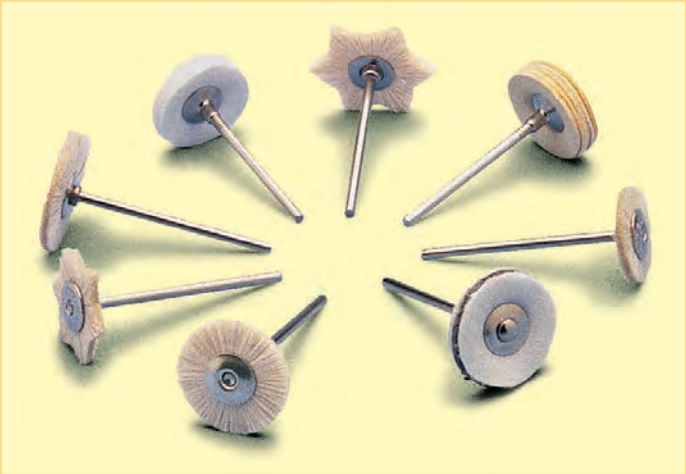
Diabolo Cleaner
1 piece
REF 340 0100 0



airaqua turbine
REF 110 0146 0

Specially selected raw materials guarantee perfect prepolishing and a brilliant high luster on all dental materials.
The wide range of shapes and materials offer new possibilities for polishing with dental motors and dental handpieces.





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Polishing metal – Survey

Standard polishing brushes



The standard line of polishing brushes includes a wide range of different shapes and sizes for various applications when polishing all types of metal.

Abraso-Soft Metal



The combination of selected natural, Chungking bristles and an open-pore special fabric absorb up to five times more polishing paste than conventional bristles.

Abraso-Buff Metal



As polishing requires less effort, the user can work in a more relaxed manner and save up to 50% of his time.

Abraso-Buff Metal Mini



The fabric layers absorb considerably more polishing paste than conventional polishing brushes.

Abraso-Buff Polipast Metal



Fabric layers impregnated with polishing paste and selected, especially stable, natural Chungking bristles reduce the time required for polishing by up to 60 %.

High Luster Buff Metal



Fifty particularly closely woven layers create a previously unattainable high luster on all alloys.

Brushes for handpieces



A large range of brushes for handpieces allows specific polishing of surface details on all alloys.

Cotton mandrel



No more spinning and punching of the cotton.

Standard polishing brushes



Chungking black converging
Ø 80 mm, 4 rows
12 pieces
REF 350 0033 0



Chungking black straight
Ø 80 mm, 4 rows
12 pieces
REF 350 0031 0

The standard line of polishing brushes includes a wide range of different shapes and sizes for various applications when polishing all types of metal.



The selected Chungking bristles are very rigid and guarantee the long service life of the brushes.



Chungking black converging
Ø 70 mm, 3 rows
12 pieces
REF 350 0029 0



Chungking black straight
Ø 65 mm, 4 rows
12 pieces
REF 350 0072 0



The single tufts of bristles penetrate the fissures to create an optimum pre-luster in the shortest po-ssible time.



Chungking black converging
Ø 65 mm, 2 rows
12 pieces
REF 350 0028 0



Chungking black converging
Ø 60 mm, 3 rows
12 pieces
REF 350 0073 0



As the star-shape beats the surface gently, this brush polishes all stippled areas quickly and precisely. Abraso-Star K80 (page 486 with integrated polishing particles adds to the effect.



Chungking black converging
Ø 50 mm, 2 rows
12 pieces
REF 350 0026 0



Chungking black
Ø 48 mm
10 pieces
REF 350 0047 0



Different versions of these brushes are available for various applications. This makes polishing much less labour intensive.



Chungking black converging
Ø 44 mm, 1 row
12 pieces
REF 350 0025 0



Chungking black
Ø 42 mm
10 pieces
REF 350 0048 0



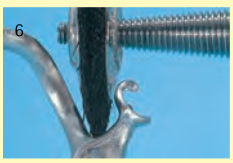
The small brush with a metal hub and short bristles abrades the metal surface and eliminates any traces left after trimming.



Hexagonal brush Chungking black
Ø 48 mm
10 pieces
REF 520 0004 8



Chungking black tapering
Ø 36 mm
10 pieces
REF 350 0063 0



This brush (REF 350 0063 0) has a metal hub and tapering bristles. It is particularly hard due to the short bristles. This enables it to polish very slender metal components and junctures aggressively.

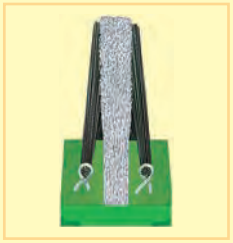
Abraso-Soft Metal



The combination of selected natural, Chungking bristles and an open-pore special fabric absorbs up to five times more polishing paste than conventional bristles. Therefore, polishing paste does not have to be applied to the brush as often. This reduces the time required considerably. The fabric is impregnated with abrasive polishing grit and does not require polishing paste for polishing soft alloys. Scratches are eliminated from surfaces faster than when using conventional brushes. This rules out the need for prepolishing with a rubber polisher.

Abraso-Soft Metal

Ø 50 mm	Ø 80 mm
1 piece	1 piece
REF 350 0102 1	**REF 350 0081 0**



The special nonwoven fabric with integrated abrasives saves time when reducing/polishing all alloys.



The special fabric adapts to every surface optimally to polish large palatal surfaces of chrome cobalt frameworks and create a perfect pre-high-luster finish.

Abraso-Buff Metal



The 2 x 3 fabric layers absorb very much more polishing paste (e.g. Abraso-Star K80, page 486) and polish effectively. As polishing requires less effort, the user can work in a more relaxed manner and save up to 50 % of his time.
The three rows of high grade Chungking bristles enhance the polish and create an optimum pre-high-luster. Any traces of trimming can be identified immediately and eliminated quickly. This brush is welded together using a special ultrasonic technique which guarantees that the bristles and fabric are gripped firmly.

Abraso-Buff Metal

Ø 50 mm	Ø 80 mm
1 piece	1 piece
REF 350 0102 5	**REF 350 0079 0**



The 2 x 3 fabric layers and selected, natural Chungking bristles are for polishing all dental alloys.



The slender shape is ideal for reaching areas which are difficult to access and polishing them to a pre-high-luster.

Abraso-Buff Metal Mini

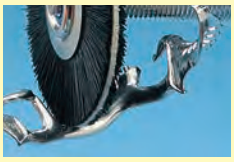


When combined with selected, natural Chungking bristles, they produce a perfect pre-high-luster on all slender components such as clasps, crowns, inlays etc.

Abraso-Buff Metal Mini
Ø 48 mm
10 pieces
REF 350 0062 0



This small metal hub brush, with 4 layers of special fabric, facilictates abrasive polishing of all alloys.



By using different polishing pastes (e.g. Abraso Star K50 REF 520 0016 1, page 487), a perfect prehigh-luster can be achieved quickly on all alloys.

Abraso-Buff Polipast Metal



Fabric layers impregnated with polishing paste and selected, especially stable, natural Chungking bristles reduce the time required for polishing by up to 60 %.
The combination of abrasive fabric and high grade Chung-king bristles creates surfaces with no scratches whatsoever, in one single session.

The eight parts of the brush are welded together permanently using ultrasonics and high pressure. This prevents the impregnated fabric layers from redating loose and thus guarantees high strength and a long service life.



Abraso-Buff Polipast Metal
Ø 50 mm
1 piece
REF 350 0102 6

Ø 80 mm
1 piece
REF 350 0086 0

Selected, especially stable, natural Chungking bristles polish more effectively and facilitate prepolishing to create non-streaky surfaces. This saves time and permits the user to work in a relaxed, non-stressed manner. High grade fabric layers store polishing paste and smooth the metal surface. Strong metal retainers grip the bristles securely.

The special grit (particle size: 1200) integrated into 2 x 2 fabric layers eliminates the scratches and rough areas, caused by trimming, from all chrome cobalt alloys.



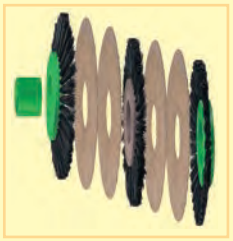
Accurate, abrasive polishing saves time and reduces costs. Scratches etc. caused by trimming are eliminated.



The Abraso-Star K80 polishing paste (REF 520 0016 2) enhances and reactivates the polishing effect as required.



The outcome is impressive: the surface on the left has been sandpapered and that on the pre-polished. All traces left after trimming are eleminated from all chrome cobalt alloys without using rubber polishers.



High Luster Buff Metal



Fifty particularly closely woven layers create a previously unattainable high luster on all alloys.

High Luster Buff Metal
Ø 60 mm, 50 layers
1 piece
REF 350 0093 0

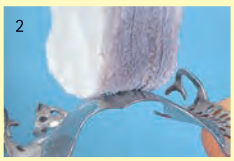
Ø 100 mm, 50 layers
1 piece
REF 350 0083 0



The hub is welded ultrasonically and grips the 50 fabric layers to prevent them from redating or becoming loose. This guarantees that the buff remains stable during polishing.



This detailed view of the fabric indicates how closely it is woven. The ends of the single threads are free and the millions of minute threads produce a silky soft surface for creating a radiant high luster.



Abraso Star Glaze high luster polishing paste enhances the polishing effect with selected material components. The high luster buff is shaped in the factory so that labour intensive shaping is no longer required before polishing.



50 layers of specially selected fabric form an extremely dense surface for polishing to a high luster. The high density surface generates a high polishing temperature and guarantees an extremely high luster on all alloys.

Metal polishing set

A complete range of polishing products for all alloys.

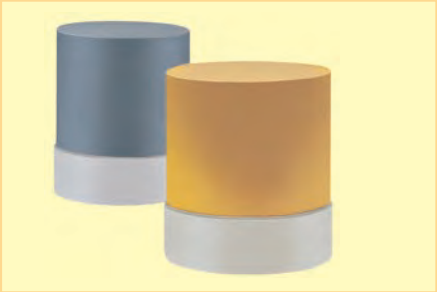


Abraso-Soft Metal

Abraso-Buff Metal

High Luster Buff Metal

Pumice polishing paste for polishing acrylic and metal.



Abraso-Star K80 high abrasion

Abraso-Star K50 low abrasion



Abraso Star Glaze
Universal high luster polishing paste for precious metals, non-precious alloys and acrylics.

Metal polishing set
Contents:

1 x 150 g	Abraso-Star K50, low abrasion
1 x 150 g	Abraso-Star K80, high abrasion
1 piece	Abraso-Soft metal
1 piece	Abraso-Buff Metal
1 piece	High Luster Buff Metal Metal
1 x 500 g	Pumice Polishing Paste
50 ml	Abraso Star Glaze

REF 350 0085 0

Prepolishing with a handpiece

A large range of brushes for handpieces allows specific polishing of surface details on all alloys.



Hexagonal brushes
Chungking, black
15 pieces each

Ø 13 mm	**REF 520 0013 0**
Ø 19 mm	**REF 520 0019 0**



The light beating effect caused by the star-shape polishes right into the deepest fissures and eliminates scratches in the shortest possible time.



Pen-shaped brushes
Chungking, black, 7mm long
15 pieces each

Ø 2 mm	**REF 350 0043 0**
Ø 4 mm	**REF 350 0041 0**



When used with Abraso Star K80 (page 486), these pen-shaped brushes facilitate polishing areas which are difficult to get at, e.g. the inner surfaces of telescopic crowns.



Round brush
Chungking, black, double the bristles
15 pieces

Ø 19 mm	**REF 350 0049 0**
Ø 22 mm	**REF 350 0056 0**
Ø 25 mm	**REF 350 0050 0**



The double row of bristles is very stable when polishing wide areas.



Round brush
Chungking, black
15 pieces

Ø 19 mm	**REF 350 0051 0**
Ø 22 mm	**REF 350 0052 0**
Ø 25 mm	**REF 350 0053 0**



The small diameter of the brush is perfect for polishing fragile components and saves time when polishing all slender areas.

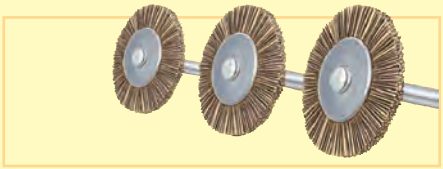


Linen buff
coated
15 pieces

Ø 22 mm	**REF 350 0091 0**



The high polishing performance and minimal dimensions provide for brilliantly polished surfaces.



Round brush Rodeo
15 pieces each

Ø 15 mm	**REF 350 0095 0**
Ø 18 mm	**REF 350 0096 0**
Ø 21 mm	**REF 350 0097 0**



Fabric discs impregnated with polishing paste polish smoother.
This saves time because no polishing paste has to be applied.



Hexagonal brushes Rodeo
15 pieces each

Ø 13 mm	**REF 520 0R13 0**
Ø 19 mm	**REF 520 0R19 0**



Specially selected tail hairs from wild horses, which vary in hardness between Chungking bristles and goat-hair, are especially suitable for prepolishing soft alloys.

High luster polishing with a handpiece

Produce a radiant high luster, even in the tiniest areas.



Cotton buff
15 pieces
Ø 22 mm **REF 350 0065 0**



Fluffy, soft cotton fibres create a mirror-like finish on soft alloys.



Linen buff
15 pieces
Ø 22 mm **REF 350 0067 0**



When used with Abraso Star Glaze, these stable fabric buffs create a brilliant high luster in areas which are difficult to access.



Felt polishing buff
15 pieces
Ø 22 mm **REF 350 0064 0**



This three layer felt buff polishes crown/facing junctures gently.



Pen-shaped brushes
Goat-hair, white, 7 mm long
15 pieces
Ø 2 mm **REF 350 0044 0**
Ø 4 mm **REF 350 0042 0**



The soft goat hairs create a high luster on outer crowns which is gentle to the surface and produces optimum friction.

Cotton mandrel



No more spinning and punching of the cotton.
- special shape of the retaining eyelet ensures that the cotton is safely held
- easy attaching of the cotton saves time during polishing



Cotton mandrel
Ø 2.35 mm
2 pieces
REF 360 0126 9



Attach a piece of cotton in the area of the retaining eyelet and press it on slightly using the finger.



Wind the cotton around the mandrel at a low speed (< 1000 rpm).



Apply polishing paste onto the cotton.



Simple and fast high luster polishing of bars and milled supports.



Occlusal areas and crowns are polished to high luster in a time-saving manner.



High luster finish of friction surfaces in the double crown technique.

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Standard polishing brushes



The soft Chungking brushes simplify polishing of acrylics and produce surfaces without striae.

Abraso-Sil Acrylic



This brush absorbs particularly much polishing paste or pumice and only releases it very slowly – for efficient prepolishing.

Abraso-Buff Acrylic



The special textile layers retain the pumice polishing paste longer so that less polishing paste needs to be added.

Prepolishing Buff Silicone



The silicone coating increases the stability of the buff. This results in increased abrasion capacity – particularly effective during prepolishing.

Abraso-Soft Acrylic



These materials absorb more pumice and retain it for a longer time. The fibre fabric reduces the friction heat.

Leather Buff



This leather buff creates a perfect high luster which prevents bacteria and deposits being trapped. Dentures are then easier to clean.

High Luster Buff Acrylic



The air is circulated continually to polish acrylic coolly and gently.

Acrylic finishing set



Abrasive finishing and accurate polishing right up to a brilliant high luster quickly and easily – especially in areas which are difficult to get at, such as on orthodontic appliances.

Brushes for handpieces



These four handpiece buffs produce a brilliant high luster on all dental acrylics.

Standard polishing brushes



Chungking white
Ø 80 mm
4 rows
12 pieces
REF 350 0034 0



Chungking white
Ø 70 mm
3 rows
12 pieces
REF 350 0030 0



The wet, mixed pumice diffuses into the brush and nonwoven fibre fabric (Abraso-Soft Acrylic).



Chungking white
Ø 65 mm
4 rows
12 pieces
REF 350 0074 0



Chungking white
Ø 60 mm
3 rows
12 pieces
REF 350 0075 0



The reduced width of the Abraso-Soft Acrylic allows perfect polishing of interdental spaces.



Chungking white
Ø 50 mm
2 rows
12 pieces
REF 350 0027 0



Goat-hair
metal core
Ø 48 mm
10 pieces
REF 350 0061 0



Chungking white
Ø 44 mm
1 row
12 pieces
REF 350 0024 0



Chungking white
Ø 24 mm
1 row
12 pieces
REF 350 0102 3



Mandrel
for polishing brush
1 piece
REF 360 0116 8

Abraso-Sil Acryl



This buff consists of a nonwoven fibre fabric in the centre between two layers of silicone-coated cotton fabric. On the outside there are two rows of bleached Chungkink bristles. This brush absorbs particularly much polishing paste or pumice and only releases it very slowly - for efficient prepolishing.

Abraso-Sil Acryl
Ø 80 mm
1 piece
REF 350 0099 3
Ø 50 mm
REF 350 0102 2



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Abraso-Buff Acrylic



This buff consists of two special textile layers and three rows of bleached Chunking bristles. The special textile layers retain the pumice polishing paste longer so that less polishing paste needs to be added.

Abraso-Buff Acrylic
Ø 50 mm
1 piece
REF 350 0102 4

Ø 80 mm
1 piece
REF 350 0078 0



The reduced width of the Abraso-Soft Acrylic allows perfect polishing of interdental spaces.



Prepolishing Buff Silicone



The buff consists of 24 layers of a silicone-coated cotton fabric. The silicone coating increases the stability of the buff. This results in increased abrasion capacity - particularly effective during prepolishing.
Additionally, the silicone coating results in considerably extended service life of the buff.

Prepolishing Buff Silicone
Ø 80 mm
1 piece
REF 350 0099 1

Ø 60 mm
1 piece
REF 350 0098 0



Abraso-Soft Acrylic



This brush consists of a central, nonwoven fibre fabric and bleached Chungking bristles on the outside. These materials absorb more pumice and retain it for a longer time. The fibre fabric reduces the friction heat.

Abraso-Soft Acrylic
Ø 50 mm
1 piece
REF 350 0102 0

Ø 80 mm
1 piece
REF 350 0080 0



The wet, mixed pumice diffuses into the brush and nonwovern fibre fabric.



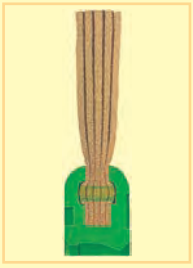
Leather Buff



This leather buff creates a perfect high luster which prevents bacteria and deposits from being trapped. Dentures are then easier to clean.

Leather Buff
1 piece each

Ø 60 mm	**REF 350 0099 0**
Ø 80 mm	**REF 350 0036 0**
Ø 100 mm	**REF 350 0035 0**





This leather buff can be used at speeds of up to 1,500 r.p.m. to polish acrylics gently and keep them especially cool.



Cool polishing even creates a high luster interdentally, which prevents deposits being trapped.

High Luster Buff Acrylic



The air is circulated continually to polish acrylic coolly and gently.



This high luster buff is ready for immediate use on a polishing motor and can be used easily and without fraying. Specially selected fabric prevents the acrylic overheating.



The fibre reinforced outer layers provide this buff with a previously unattainable stability.



The 35 layers of textile have been welded into place ultrasonically to prevent them redating and, due to their high strength, create a previously unheard of high luster.



The loose woven textile circulates the air during high luster polishing and prevents the acrylic from overheating. Therefore, it polishes very gently.

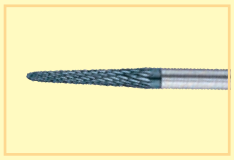
High Luster Buff Acrylic
1 piece each
Ø 60 mm 40 layers **REF 350 0094 0**
Ø 100 mm 35 layers **REF 350 0082 0**

Acrylic finishing set

Abrasive finishing and accurate polishing right up to a brilliant high luster quickly and easily - especially in areas which are difficult to get at, such as on orthodontic appliances.

The Diatit coated cutter is especially long lasting and as cost-effective as never before.

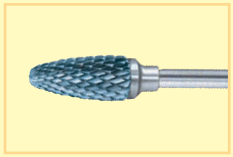
Three different abrasive grits provide for accurate polishing right up to a brilliant high luster.



Tungsten carbide cutter
1 piece
REF D 200 KF 23



Pressure can be exerted as necessary to reduce the material as required.



Tungsten carbide cutter
1 piece
REF D 263 KG 60

Assortment

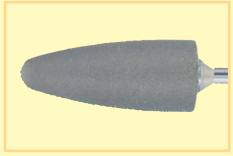
5 pieces
Abraso-Gum Acrylic
2 Tungsten carbide cutter
1 Acrylic polisher coarse green
1 Acrylic polisher medium grey
1 Acrylic polisher fine red
REF 350 0099 2



Acrylic polisher coarse green
1 piece
REF P 243 HG 10



The green, coarse polisher removes all traces of finishing effortlessly.



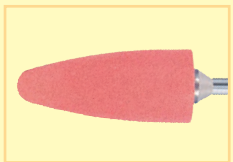
Acrylic polisher medium grey
1 piece
REF P 243 HM 10



The grey polisher polishes slightly abrasively and prepolishes in one stage.



Shows the polished surface. A brilliant high luster with no scratches.



Acrylic polisher fine red
1 piece
REF P 243 HF 10



The high luster polisher creates an excellent high luster on all acrylics in the shortest possible time.

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Polishing acrylic set

A complete range of polishing products for all acylic techniques.



Abraso-Soft Acrylic | Abraso-Buff Acrylic | High Luster Buff Acrylic | Pumice polishing paste for acrylic

Polishing acrylic set

Content:

1 x 150 g	Abraso-Star K50, low abrasive
1 x 500 g	Pumice polishing paste
1piece	Abraso-Soft Acrylic
1piece	Abraso-Buff Acrylic
1piece	High luster Buff Acrylic

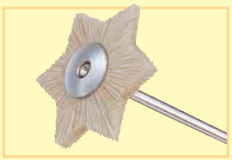
REF 350 0084 0



Abraso-Star K50
low abrasion

Prepolishing with a handpiece

Satin soft goat-hair brushes prepolish gently.



Hexagonal brushes
Goat-hair white
15 pieces
Ø 19 mm
REF 520 0015 1



The star-shape increases the polishing performance by up to 50 % and saves a great deal of time.



Hexagonal brushes
Goat-hair white
15 pieces
Ø 13 mm
REF 520 0014 1



The smaller brush prepolishes all narrow areas gently.



Round brush
Goat-hair white
double the bristles
15 pieces
Ø 22 mm
REF 350 0055 0



The large diameter is ideal for polishing large surfaces such as facings.



Round brush
Goat-hair white
double the bristles
15 pieces
Ø 19 mm
REF 350 0054 0



Doubling the number of bristles has provided the necessary stability, even when polishing interdental spaces.

High luster polishing with a handpiece

These four handpiece buffs produce a brilliant high luster on all dental acrylics.



Linen buff
15 pieces
Ø 22 mm
REF 350 0067 0



This stable fabric buff creates a brilliant high luster, even on the hardest facing acrylics.



Cotton buff
15 pieces
Ø 22 mm
REF 350 0065 0



Super soft cotton threads polish palatal rugae optimally and do not leave rough areas which would trap deposits.



Leather Buff
15 pieces
Ø 22 mm
REF 350 0066 0



Polishing cool with a leather buff prevents harm to thin metal margins.



Polishing buff
felt, 3 layers
15 pieces
Ø 22 mm
REF 350 0064 0



The three rows of felt adapt to every structure optimally, which simplifies polishing intricate details.

Abraso-Fix





	2 pieces	8 pieces
green - coarse		
Pen-shaped brushes		
Ø 4 mm **REF**	**350 0075 7**	**350 0076 2**
Round brush		
Ø 22 mm **REF**	**350 0059 0**	**350 0075 5**



Perfect for quickly pre-polishing stippled chrome cobalt denture bases.

Fine abrasive particles integrated into the bristles enable all dental materials to be prepolished without using polishing paste.



	2 pieces	8 pieces
blue - regular		
Pen-shaped brushes		
Ø 4 mm **REF**	**350 0075 6**	**350 0076 1**
Round brush		
Ø 22 mm **REF**	**350 0057 0**	**350 0075 4**



The gentle abrasion enables all outer telescopes to be polished to a high luster accurately.



	2 pieces	8 pieces
red - fine		
Pen-shaped brushes		
Ø 4 mm **REF**	**350 0046 0**	**350 0076 0**
Round brush		
Ø 22 mm **REF**	**350 0060 0**	**350 0075 3**



The soft abrasiveness makes it possible for an exact high luster finish even on secondary attachments.



	2 pieces	8 pieces
yellow - extra fine		
Pen-shaped brushes		
Ø 4 mm **REF**	**350 0045 0**	**350 0075 9**
Round brush		
Ø 22 mm **REF**	**350 0058 0**	**350 0075 2**



The fine polishing particles create an optimum pre-high luster on all facing acrylics in the shortest possible time.



	2 pieces	8 pieces
yellow - extrafine		
Pen-shaped brushes		
Ø 2 mm **REF**	**350 0077 0**	**350 0070 0**



The particularly slender shape polishes occlusal surfaces right into the smallest fissures.

Assortment

4 pieces
Round brush
1 piece each: extra fine, fine, regular, coarse
REF 350 0075 1

Assortment

4 pieces
Pen-shaped brushes
1 piece each: extra fine, fine, regular, coarse
REF 350 0075 8



Polishing porcelain



The yellow Abraso-Fix brush creates a perfect prehigh luster on all porcelains.



Felt wheels
unmounted
Ø 12 mm
100 pieces
REF 350 0071 0



Extremely long lasting due to pressure impregnation and the hardness.

Metal polishing pastes

For optimum, abrasive prepolishing right up to high luster polishing - specially developed polishing pastes enhance the properties of all polishing brushes. This saves time, allows the user to work in a relaxed, non-stressed manner and improves the quality of the work.



Abraso-Star K80
high abrasion
320 g
REF 520 0016 2



Abraso-Star K80 is highly abrasive, which simplifies polishing all non-precious alloys.



As K50 and K80 stick to all polishing brushes well, abrasive polishing can be carried out longer than when using conventional polishing pastes.



Titapol Polishing Paste
150 g
REF 520 0015 3
350 g
REF 520 0015 4



This titanium polishing paste prepolishes abrasively, almost up to a perfect high luster.



A handpiece brush and Titapol prepolish accurately, even in areas which are difficult to access and in the shortest possible time.



Abraso Star Glaze
High Luster Polishing Paste
2 x 50 ml
REF 520 0016 3



Abraso Star Glaze creates an optimum high luster quickly and easily.



The excellent polishing properties reduce the effort required when polishing with a handpiece.



Brepol
50 g
REF 540 0103 7



The round goat-hair brush and Brepol provide perfect high luster on all non-precious metal alloys.



Safe polishing of clasp dentures with the handpiece

High luster polishing paste for none-precious metal alloys high luster without prepolishing.



Crowns and bridges made of non-precious metal alloys are polished as easily as gold.



After milling, polish telescopic and conical crowns to high luster without prepolishing. Perfectly suitable for the inner surfaces of secondary crowns.

Accessories:



Round brush
Goat-hair white
double the bristles
Ø 19 mm, 15 pieces
REF 350 0054 0





Pen-shaped brushes
Chungking, black
7 mm long
15 pieces
REF 350 0041 0



Attachment, shear distributor and CoCr structure are quickly and neatly polished to high luster.

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Telephone (+49) 0 73 09 / 8 72-4 40

Metal and acrylic polishing pastes



Pumice Polishing Paste
for metal and acrylic
3 x 500 g
REF 520 0016 0



The gentle polishing properties allow all traces left from finishing to be removed from all soft alloys in seconds.



The low abrasion constituents of this pumice polishing paste simplify polishing metal/acrylic junctures.



Abraso-Star K50
slightly abrasive
320 g
REF 520 0016 1

Acrylic polishing paste



Acrypol High Luster
Paste for facing acrylics
170 g
REF 520 0017 0



Slightly abrasive materials create a virtually perfect high luster. Simply polishing over the surface with a cotton buff is all that's needed to produce a perfect high luster.

Porcelain polishing paste



Diamond Polishing Paste
5 g
REF 540 0014 0

Polishing paste with a high diamond content and long lasting, impregnated, hard felt wheels provide for the best possible finish on all porcelains.

The high percentage of diamond particles provides for maximum abrasion and the best possible high luster.



The special consistency of the polishing paste enables it to diffuse into the felt and polish for up to five times longer.



The paste liquefies during polishing and can be pushed backwards and forwards on the facing without splashing.

Zi-polish - the perfect mirror polish!



***Zi*-polish**
5 g
REF 360 1002 5

Zircon polishing paste for high gloss surfaces. Two different diamond grain sizes for pre- and high gloss polishing of marginal edges, basal areas, primary crowns, individual abutments and bars. The special binding agent avoids spraying of the polishing past when dipping the brush into the paste container. This also reduces paste consumption.

- the high content of diamond particles reduces polishing time and leaves a highly glossy surface
- special binding agent reduces paste consumption
- proper wipe off of pre polish residues from dents



Due to a special binding agent the paste sticks to the brush, saving material also.



Perfect and speedy mirror polish is achieved by high diamond particle density.

Dentaclean mixing fluid for pumice powder



Protects against germs.

Dentaclean mixing fluid for pumice powder
- Remains moist and free of germs for two to three weeks without having to be remixed.
- Contains skin-care additives to protect employees' hands.
- Contains natural odours which still smell fresh after several weeks.
- Mixed polish adheres to the brush and re-storstion better so that the pumice splatters less. This saves time when polishing as the pumice slurry does not have to be applied repeatedly



In wet punmise powder disease microbs are present. Disinfection action occures within one hour.

2



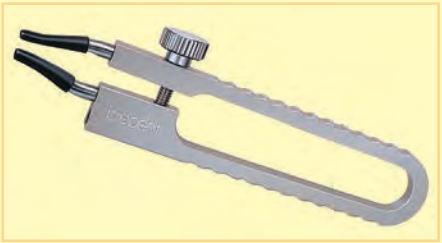
The nurturing effect for the skin is acheived by skin nurturing addative.

Dentaclean mixing fluid for pumice powder
5000 ml
REF 520 0099 8

Dentaclean mixing fluid for pumice powder
1000 ml
REF 520 0099 9

Application:
Simply mix the pumice powder with Dentaclean mixing fluid for pumice powder, do not add water. This way the pumice powder stays moist for two to three weeks.

Pollygrip



Grips all crowns, bridges and inlays firmly for finishing and polishing precisely.

Crown holder, wide
1 piece **REF 360 0100 0**

Crown holder, narrow
1 piece **REF 360 0099 0**

Replacement parts:

Special rubber sleeves
100 pieces **REF 360 0096 0**

1



The rubber sleeves can be exchanged and grip firmly during all procedures.

2



Even minute inlays can be held firmly and without causing harm.

Assortment

23 pieces
1 Pollygrip
1 Crown holder, wide
1 Crown holder, narrow
20 Special rubber sleeves

REF 360 0095 0

Accessories:



Crown holder, wide
1 piece
REF 360 0098 0



Crown holder, narrow
1 piece
REF 360 0097 0

3

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