

2013/2014

CLASSIC

LAB EQUIPMENT

**AMANNGIRRBACH** **artex**[®] **giroform**[®] **smartbox X2** **smartmix X2** **splitex**[®] **alpenrock**

Looking for simplicity, precision and affordability? We understand your needs!



LAB EQUIPMENT CLASSIC

YOUR + points

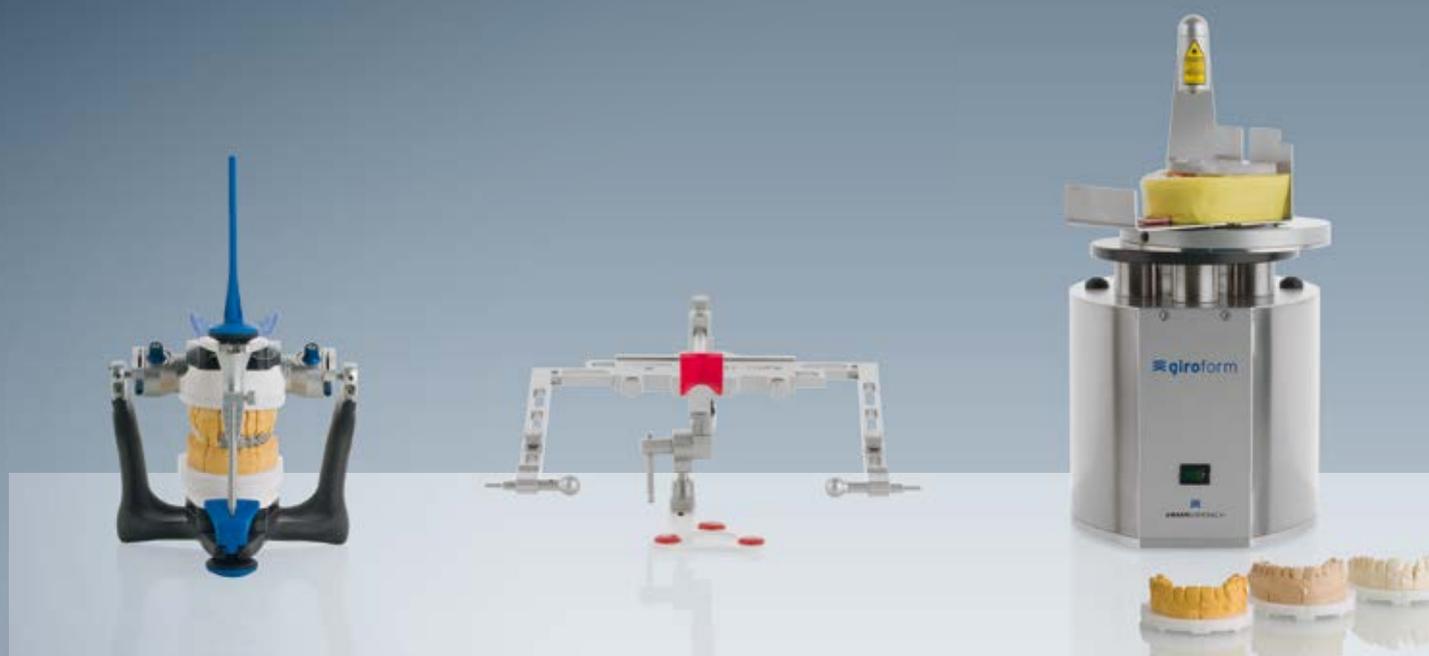
- _ Cost-effective precision models for every laboratory
- _ Precision from A to Z for perfect work preparation
- _ Simple and user-friendly operation



Precision from start to finish.

ARTICULATION

MODEL FABRICATION



 artex®

Model management articulator and masticatory loading simulator for the dental practice and laboratory

- _ Provides all functions for analysing the free spaces and excursion patterns
- _ Variable sideshift function for transversal clearance, adjustable

 artex® facebow

Anatomically correct fixation of the cranial-axis relationship in just 2 minutes

- _ Cranium-axis orientated model transfer to the articulator reduces the time required for spot grinding
- _ Quick and secure the 3-D universal joint
- _ Reliable reproducibility of the arbitrary axis position

 giroform®

Precise, low-priced and quick for cost-optimised precision models

- _ Overcomes expansion of dental stone due to segmentation of the dental arch
- _ Model made in just six minutes
- _ Perfect "basis" (precision model) for digitisation

DOSING | MIXING | CLEANING



smartbox X2

The most homogenous plaster dispensing method yet

- _ 20% to 25% saving in time, material and dental stone
- _ Reproducible mixing ratio at the push of a button, accurate to within a gram
- _ Multifunctional rotary/ push button for easy, quick operation

smartmix X2

Perfect mixture results thanks to patented mixing blade geometry and amazingly simple operating concept

- _ Consistent, reproducible mixtures with optimal parameter
- _ Quick access to all required mixing parameters
- _ Meets the requirements of modern high-performance plasters and embedding masses

ceramill multi-x

The indication champion for zirconium oxide

- _ Small price, wide range of applications
- _ Optimal workflow through spherical shells
- _ Common, dental technical working method, easy to learn

MILLING | CASTING



ceramil therm

Fully automatic high-performance furnace for final sintering of distortion-free frameworks

- _ Optimally coordinated, fully automatic sinter programme
- _ High process reliability due to constant temperature control and homogeneous temperature distribution
- _ 4 sintering programme locations; one of them individually programmable by the user

noflame[®]plus

The "electric" Bunsen burner replaces the open flame

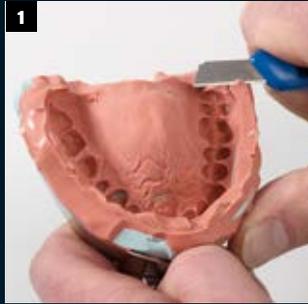
- _ Mobile and immediately operational, no gas required
- _ No heat emission into the environment; does not consume oxygen
- _ Clean, i.e. no soot particles on instrument and/or material

af350

Universal use thanks to modular components

- _ High-precision milling machine. Due to its modular construction it can be used for surveying or blocking out

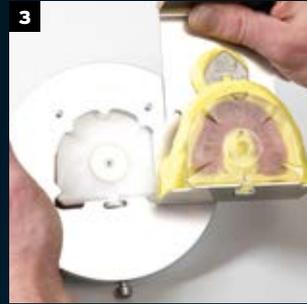
From the impression to the finished, high-precision Giroform® model and application in the Artex® articulator*



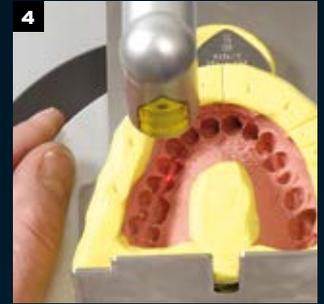
1 Trim the impression (working model)



2 The impression is fixed onto the impression carrier with Giroform® – putty, align the impression and putty insulation is trimmed



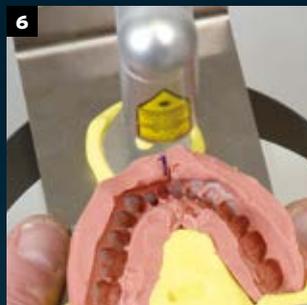
3 With the Giroform® base plate inserted, the impression carrier is attached to the plate holder



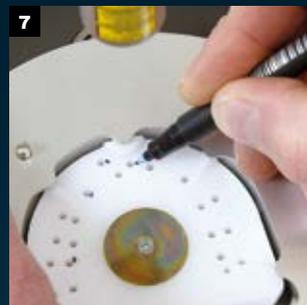
4 Position drilling hole with the aid of the laser beam and initiate drilling procedure



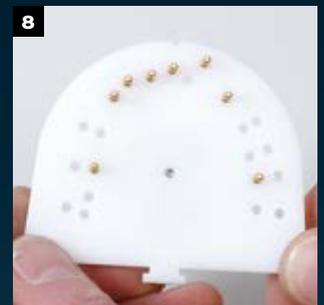
5 When the Giroform® pins have been inserted into the drilled holes, the base plate is put aside for later use. (Important when multiple models are produced)



6 Trimmed impression of the opposing jaw on impression carrier, while the holes for the 8 pins are drilled for the counter bite



7 Mark out the selected drilling hole on used base plate (multiple usages)



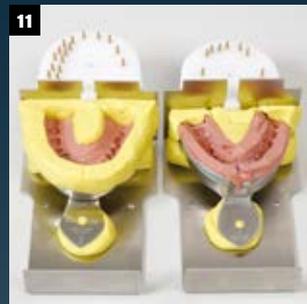
8 Used plate with drilled holes and pins for opposite bite



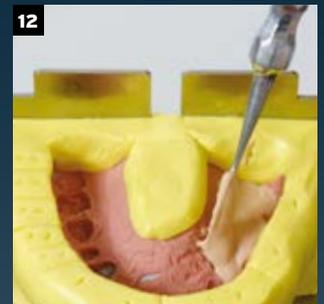
9 Smartbox - push button for water and plaster powder dosage



10 Smartmix mixes the dental arch plaster



11 Upper and lower jaw prior to stone pour in each case with pinned bases



12 Fill the alpenrock eliminating any voids into the impression model - only to the top of the putty insulation



13 After 30 minutes, the dental arch is detached from the base plate



14 Partition/saw tooth arch into segments (Tip: in order not to damage the tooth arch, first separate the tooth arch in the middle)



15 Giroform® model pair



16 At the dental lab, the transfer table is placed in the articulator or the special mounting articulator used as a plastering device

*Method can be used for patients with optimally functioning pre-condition.



17 Artex® CR with inserted upper jaw model



18 Giroform®-Models were articulated in static occlusion using a face bow registration



19 Mark out the grinding facets on the occlusion with a pencil



20 Reduce the master model for height analysis. Remove all segments up to the neighbouring teeth from the model



21 Open the side shift setting screw to open the ISS. Set the anterior guidance pin out of contact



22 To determine the height the antagonists are put into their deepest position alongside one another. Articulator centric is open



23 Re-insert the other segments and remove the segments that determine the height. Use articulating film to mark out and adjust any premature contacts - with the centric articulator relation closed



24 Check the dynamic occlusion - lateral motion. Are the abrasion facets on the teeth close to the restoration area providing guidance now?

The Artex® facebow - the better way to obtain an anatomically correct registration of the patient's cranium/axis relationship



1 Preparation of the facebow: The nasion bar is secured in a rear position. Joint support inserted with its vertical position fixed by a wing screw



2 Prepare the bite fork in a double-boiler



3 Introduce the bite fork into the patient's mouth



4 Position the bite fork at the dental arch of the upper jaw



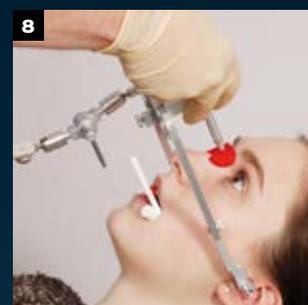
5 Move the Artex® facebow close to the patient's face



6 Introduce the ear tips into the external auditory meatus while sliding the sides of the facebow together and fix them in position by tightening the locking screw



7 Place the nasion adapter on the glabella by applying gentle thumb pressure till the marker on the nasion bar is reached. Patient is lying down



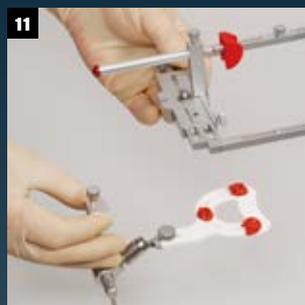
8 Fix the nasion bar by tightening the screw on the bar with your free hand



9 Move the joint support up to the bite fork and tighten the wing screw, thus securing the position of the upper jaw



10 It takes only 2 minutes to apply the facebow



11 Remove the facebow and detach the joint support together with the bite fork registration

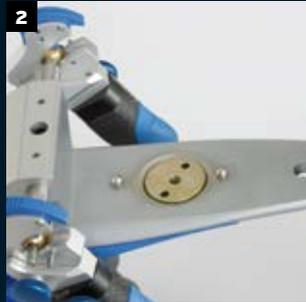


12 Fix the bite fork registration on a plaster bed on the transfer table for safe transport of the secured upper jaw position to the dental lab

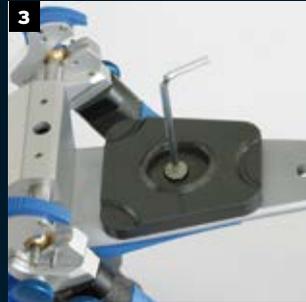
Sidestep Splitex® Calibration



1 Remove model plates, magnets and magnet holders from the upper and lower parts of the Artex® articulator



2 Replace the magnet holders by the mounting plates and secure them with screws in the upper and lower parts of the Artex® articulator



3 Screw down the Splitex® TOP plate on the upper part of the Artex® articulator



4 Insert the Splitex® magnet holder and magnet into the TOP plate



5 Insulate the carbon surface in the area of the adhesive plate by applying a thin layer of petroleum jelly



6 Screw down the adhesive plate onto the lower part of the Artex® articulator



7 Place the Artex® articulator upside down and put Splitex® key in place



8 Put Splitex® mandibular adjustment plate on top of the key



9 Apply two strands of glue near the center of the Splitex® plate



10 Close the Artex® articulator and let the glue dry



11 Calibrate further Artex® articulators using the Splitex® key for metric commonality



12 Models can be transferred from one calibrated Artex® articulator to the next as every dental technician and every dentist has his or her own Artex® articulator

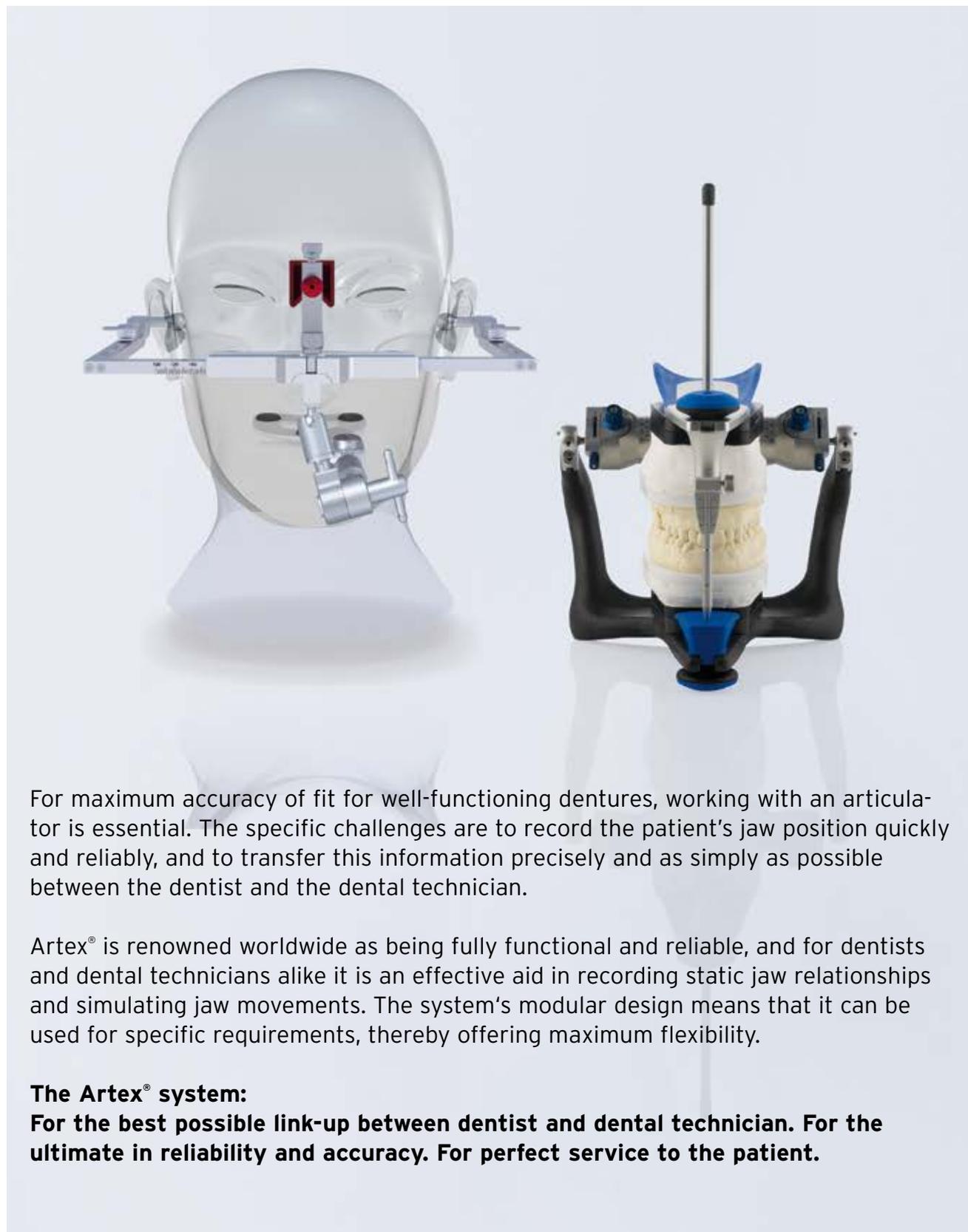


ARTITION UN

 artex [®]	C 12
 ceramill artex [®]	C 19
 splitex [®]	C 20
 artex [®] incisal guidance	C 21
 artex [®] facebow	C 22

artex[®] system

Artex[®] system - the perfect communication
between dentist, dental technician and the patient



For maximum accuracy of fit for well-functioning dentures, working with an articulator is essential. The specific challenges are to record the patient's jaw position quickly and reliably, and to transfer this information precisely and as simply as possible between the dentist and the dental technician.

Artex[®] is renowned worldwide as being fully functional and reliable, and for dentists and dental technicians alike it is an effective aid in recording static jaw relationships and simulating jaw movements. The system's modular design means that it can be used for specific requirements, thereby offering maximum flexibility.

The Artex[®] system:

For the best possible link-up between dentist and dental technician. For the ultimate in reliability and accuracy. For perfect service to the patient.

artex[®] system

Artex[®] facebows and articulators, the better way to ensure correct static and dynamic occlusion of dental prostheses



Quick, safe, efficient, simple and low-cost: obtaining and communicating patient data using Artex[®].

The Artex[®] facebow, transfer stand and articulator form a complete data communication system. The dentist uses the Artex[®] facebow to determine the patient's maxillary position in relation to the cranial axes. This important anatomical information is obtained quickly, precisely and efficiently and secured safely on the transfer stand for its transport from the dentist's office to the dental laboratory. There, the models are placed in an Artex[®] articulator serving as a virtual patient.

This simple and highly efficient transfer of the facebow registration using the Artex[®] articulator allows work to be continued as if at chairside, significantly reducing the time for corrections in terms of occlusal contouring.



Artex[®] articulators - effective, precise, stable and sensitive movement simulators.

Produced by the dental technician in an articulator, a dental prosthesis must function without a problem for the patient. An articulator is a great way to emulate the patient's movements, saving the dentist chairside time and the patient quite a bit of pain.

The reproducible centric relation ensures safe starting and end positions of every jaw movement. The Artex[®] articulator can discover, check and remove any defects smaller than 20 µm.

Lightweight, stable, ergonomic and very precise - the Artex[®] articulator facilitates and accelerates work on the model. It is practice-oriented, reliable and competitively priced. For these reasons, the Artex[®] brand enjoys such a good reputation and its articulators are among the most popular world-wide. The Artex[®] product range employs a modular design and is focused on features that are really necessary.



artex[®] system

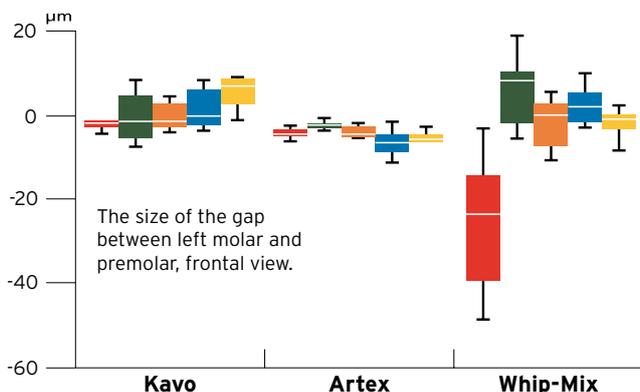
Splitex[®] system - for accurately calibrating Artex[®] articulators



Accurate calibration of the Artex[®] articulators using Splitex[®]

Calibrated articulators facilitate model transport from the practice to the laboratory: the work produced and checked for function in the articulator at the dental lab will work just as well with a perfect receptor fit in the patient's mouth.

Every dental technician and dentist will have his or her own calibrated articulator. This will save costs of delivery and prevents articulator damage, thus enhancing economic efficiency.



The high precision of the Artex[®] articulators ensuring a perfect receptor fit in the patient's mouth has been impressively confirmed by a scientific study conducted at Tuft's University, Boston, MA, USA.

Scientifically tested precision:

all 4 Artex articulators (classic-version) have smaller dimensional deviations than comparable competitors

Source: „Determining the accuracy of articulator interchangeability and hinge axis reproducibility“, Panayiota Hatzl (DDS, MS), Philip Millstein (DMD, MS), Alvaro Maya (DMD, MSD) - School of Dental Medicine, Tufts University, Boston, Mass.
 Publishing: J Prosthet Dent 2001, 85:236-45



artex[®] system

The high-performance, precise and transferable system for simulating jaw movement

Artex[®] FacebowArtex[®] ArticulatorsArtex[®] Transfer StandSplitex[®]-keysArtex[®] Transfer Table

SYSTEM COMPONENTS



YOUR + POINTS AT A GLANCE

+ Full system

- _ Transfer chain from facebow to articulator
- _ Fast and reliable transfer of patient data between dental practice and laboratory

+ System compatible

- _ Well thought out graduation of articulator types
- _ System entry can be matched consistently to the profile of requirements

+ Modular

- _ Intelligent, modular design of the entire Artex[®] system
- _ Can be used for all indications

+ Precise

- _ High-precision manufacturing in resistant materials ensures the lowest tolerances and highest quality standards for day-to-day use

+ Proven

- _ System renowned and successful world-wide
- _ Built on the experience of 25 years in articulator construction

artex® articulators

The basic principles of all Artex Articulators



- _ Integrated magnetic model plate system
- _ Adjust design for high-precision receptor fit
- _ Lower part of articulator designs CN, CT, CT and CR made of carbon:
 - makes for lightweight, strong and ergonomic design and easy handling
 - 3 positions, no tipping over
- _ Overall height, internally: 126 mm - large working area offering a lot of space for mounting models
- _ Reliably reproducible centric relation for the starting and end positions of every movement, checking position for static occlusion
- _ Bonwill triangle with 110 mm side length, made up of the intercondylar distance and the incisal point
- _ Average-value marking of the occlusal surface plane
- _ Adjustable scaled anterior guidance pin (-5 mm to +10 mm)
- _ Support pin for upper part of the Artex® articulator flipped back
- _ Calibration using Splitex®

All Artex® articulators at one sight

Technical Data Chart	Non Arcon-Design			Arcon-Design	
	Artex® BN	Artex® CN	Artex® CT	Artex® CP	Artex® CR
SCI (Sagittal condylar inclination)	35°	35°	-15° to +60°	-20° to +60°	-20° to +60°
Bennett-angle (HCI)	15°	0° to +20°	0° to +20°	-5° to +30°	-5° to +30°
Protrusion	-	-	-	-	0 to 6 mm
Retrusion	-	-	-	-	0 to 2 mm
ISS (Immediate Sideshift)	-	-	-	-	0 to 1,5 mm (per side)
Distraction	-	-	-	0 to 3 mm	0 to 3 mm
Centric design	Centric click	Centric click	Centric click	Centric lever for semi-axes	Centric lever for semi-axes
Upper and lower articulator arms prevented from coming apart inadvertently in open centric by:	Centric plate	Centric plate	Centric plate	Arcon-Clip	Arcon-Clip
Arbitrary pins for direct transfer with Artex facebow	no	no	yes	yes	yes



artex® articulators

in Non-Arcon design

- _ Safe and easy handling due to positively driven condyle balls
- _ The anatomy is upside-down. The condyle ball is on the upper part, the condyle guidance plane is in the lower part of the articulator
- _ The upper and lower parts of the non-arcon articulator are in unison, even in an open centric position

artex® bn



The Artex® base model - the economic entry to the Artex® world of articulators

- _ Non-Arcon design centric articulator
- _ The same basic concept as all Artex® articulators
- _ Precise functional parts made of aluminium and stainless steel
- _ Fixed condyle with 19mm track radius
- _ Fixed average condyle track inclination at 35°
- _ Fixed Bennett angle at 15°
- _ Upgradable and compatible with higher end Artex articulators

artex® cn



The non-Arcon carbon base model - the bestselling Carbon-Artex® - the entry to the world of Artex®-Carbon

- _ Artex®-Carbon - lightweight, robust, ergonomic and highly precise
- _ Simple and pleasant handling
- _ 3 working positions, no tipping over
- _ "Click" - centric quick lock
- _ Fixed average condyle track inclination at 35°
- _ Bennett angle adjustable from 0 to 20°

artex® ct



The non-Arcon workhorse - the prosthetic articulator

- _ Partially adjustable non-Arcon articulator
- _ Artex®-Carbon - lightweight and robust, providing perfect handling
- _ Adjustable inclination of the condyle track inclination from -15° to 60°
- _ Bennett angle adjustable from 0 to 20°
- _ "Click" - centric quick lock
- _ Arbitrary pins for face bow adaptation

artex® articulators

in Arcon design

- _As found in natural anatomy: The condyle ball is on the lower part, the condyle guidance plane is on the upper part of the articulator.
- _Adjustment of the condyle guidance elements is possible using an individual position registration.

artex® cp



The Arcon base device

- _Partially adjustable Arcon articulator with super smooth condyle track guide
- _Artex®-Carbon - lightweight and robust, providing perfect handling
- _3 working positions, no tipping over
- _High-precision and robust centric quick lock via mechanically guided semi axis
- _Arbitrary pins for direct transfer with the Artex® facebow
- _Adjustable inclination of the condyle track inclination from -20° to $+60^{\circ}$
- _Distraction permitting release of compressed mandibular joints from 0 to 3 mm
- _Arcon clip prevents separation of upper and lower articulator parts while centric is open
- _Bennett angle adjustable from -5° to $+30^{\circ}$

artex® cr



Model management articulator and universal diagnosis and therapy device

- _Provides comprehensive adjustment possibilities to reproduce the patient's clearance and movement dynamics
- _True masticatory simulator for practice and laboratory
- _Fully adjustable Artex® Carbon articulator offering the following additional functions:
- _Variable sideshift function for transversal clearance, adjustable from 0 to 1.5 mm (for each side)
- _Variable protrusion, adjustable from 0 to 6 mm
- _Variable retrusion, adjustable from 0 to 2 mm
- _Distraction permitting release of compressed mandibular joints from 0 to 3 mm
- _Ideal for model analysis, splint manufacture and correction
- _Artex®-Carbon - lightweight and robust, providing perfect handling, also combining all the Artex® CP advantages
- _Adjustable inclination of the condyle track inclination from -20° to $+60^{\circ}$
- _Bennett angle adjustable from -5° to $+30^{\circ}$



Virtual Artex® CR as Upgrade for Ceramill Map400 and Ceramill Mind. The functional interface between manual and digital prosthetic dentistry

With manual production of dental prosthesis working with the articulator is standard for dental laboratories. In order to achieve the same quality of the works virtually, it is only logical and consistent to enable this by means of a CAD-CAM system. The virtual articulator "Ceramill Artex" serves as a bridge between manual and digital techniques:

The model pair in the Artex articulator is transferred to the Map400-scanner while holding the same Artex mode by means of the Ceramill transferkit; it is subsequently scanned-in in the appropriate proportion.

The movement options of the Artex® CR are thus synchronised digitally and manually. Interfering structures can already be removed, reducing time-consuming grinding in at the chairside to a minimum.



- _ Fully visualised Artex® CR for a quick introduction to the digital world
- _ The virtual articulator offers the same functional scope as compared to the real Artex® CR (Adjustment modes of the horizontal inclination of condylar guidance (Bennett Angle; Retrusion; Immediate Side Shift))
- _ The transfer of the models by means of the Ceramill Fixator ensures the precision at the functional interface between manual and digital techniques
- _ The calculation of the fully anatomical construction is dynamic and static under consideration of the antagonists and the adjusted values of the articulator
- _ Space for the porcelain built-up is automatically foreseen during the construction - thus an optimal framework basis is established for veneers with high stability and a consistent layer thickness

INFO

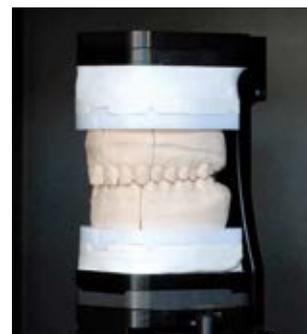
All information about the virtual articulator is available in our „Digital Lab Equipment“.



QR-Code



Models in the real Artex CR



Models in the Ceramill Fixator as a transfer interface in the Ceramill Map400



Adjustment modes at the virtual Artex® CR

splitex® calibration

Scientifically proven: Artex® Articulators can be calibrated to a standardization with tolerances <math>< 10 \mu\text{m}</math>

Using the Splitex® Key and Splitex® Plate Set, all Artex® Articulators are calibrated similarly. This magnetic plate system serves as a metrical aid to calibrate different articulators. The precision of calibration is such that deviations are brought down to below $10 \mu\text{m}$. This means that models can be mounted and changed with precision on any calibrated Artex®.

Additionally, the ability to calibrate the Artex® Articulators simplifies the process of transferring the model from the practice to the laboratory. Where both parties have a calibrated articulator, then only the models need to be transported, and not the complete articulator. Not only does this protect the articulator against handling problems, it also saves on postal charges.



- _ Scientifically proven: Artex® Articulators can be calibrated to a standardization with tolerances <math>< 10 \mu\text{m}</math>
- _ Saves articulators and increases their profitability
- _ Every dental technician and dentist has his/her "own" articulator
- _ Simplifies dispatch (only the model) and increases the information flow
- _ Splitex® Counter plates prevent the risk of poor fit caused by plaster expansion and guarantee quick, precise adaptation to Splitex® metal plates



Splitex®-keys



Splitex® counter-plates in black or white



Splitex® plate set for the carbon version

artex® incisal guidance

Protects the posterior teeth and ensures anterior tooth function

It is necessary to reproduce the incisal-canine guidance to ensure that there is no overloading or incorrect loading in the posterior region caused by restoration of anterior teeth.

Customised incisal guidance is used for the fabrication of functional anterior restorations, because correct anterior tooth function is essential to ensure a durable posterior restoration and conservation of the remaining posterior teeth.

The incisal-canine guidance can be determined using the diagnostic models before grinding the teeth and transferred to settings of the customised incisal guidance unit.

The customised incisal guidance in the Artex® articulator is used in the same way both in the manual and digital technique. The customised incisal tooth guidance is also a component of the Ceramill Artex® virtual articulator.



- _ Reproduces the incisal guidance of the patient
- _ Used for copying or adjusting an existing incisal guidance
- _ Correct anterior tooth function protects a posterior restoration against overloading
- _ Avoids ceramic fractures due to overloading
- _ Also practical for setting up guidance with posterior restorations
- _ Avoids excessive grinding
- _ Component of the Ceramill Artex® virtual articulator



Setting the customised incisal-canine guidance with diagnostic models - the posterior teeth disocclude



Prepared anterior with applied customised incisal-canine guidance



Customised incisal guidance table in the Ceramill Artex®. The virtual and analogue techniques are identical

artex® facebow

Anatomically correct fixation of the cranial-axis relationship in just 2 minutes

The Artex® Facebow is not just a success on account of its ease of handling, but also makes it possible to work rapidly and economically: in just two minutes, the cranium/axis relationship is determined in correspondence to the patient's anatomy.

In functional diagnostics and treatment, it is an indispensable tool which considerably reduces grinding time at chairside.



Artex® facebow

- _ Cranium/axis relation determined in corresponding to the patient's anatomy in just two minutes
- _ Quick and secure the 3-D universal joint
- _ Cranium-axis oriented transfer of maxillary model to the articulator transfers the real jaw position precisely to the articulator and consequently reduces grinding time at the chairside
- _ Reliable reproducibility of arbitrary axis position using cushioned Leipzig Nasion



Bite fork insertion



Face bow attached to the patient



Removing joint support with bite fork record from the face bow



FABBRICAZIONE MODELLO

 giroform® system	C 24
 giroform® pin drill	C 28
 giroform® baseplates	C 29

giroform® system

The Giroform® system outsmarts the plaster expansion and is simple, fast and precise



The fitting accuracy of dental prostheses is largely dependent on the precision of the models. Yet this is the very area in which the natural expansion of the plaster constitutes the greatest source of error. The effects of plaster expansion are evident in the patient's mouth in problems with the fit of prosthetic work, such as tension areas.

Giroform® outsmarts the plaster expansion of the jaw segment, thus providing a true model of the patient's mouth.

The Giroform® System provides dental technology with a perfect and high-precision model making system on the market. By employing standardized and optimized procedures Giroform® guarantees permanent and reproducible quality.

Saves time, saves material.

Simple procedures and maximum precision.

giroform® system

Precise, simple
and fast

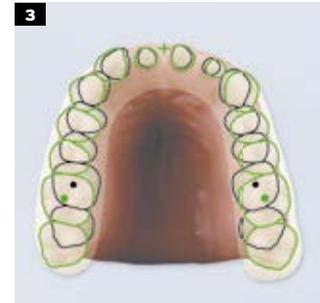
Undesirable plaster expansion in making the model



1 The patient's original mouth position.



2 The tooth arch following plaster expansion.



3 By superimposing the original and the expanded tooth arch, the deviation is clearly shown.

How does Giroform® solve this challenge?

Defeat expansion with Giroform® = Eliminate tensions from prosthetic work



4 The pin positions are chosen taking this cast into account. By drilling the pin-holes, there is secure and immovable patient-analogous transfer to the dimensionally-stable Giroform® Plate.

The pin-holes ensure that the positional information is now stored. The Giroform® Base Plate serves as a kind of memory stick.



5 The cast plaster tooth arch is removed from the base plate after 30 minutes - i.e. before the onset of plaster expansion.

This allows the tooth arch to expand freely. However, after this it no longer matches the drilled original information on the Giroform® Plate.



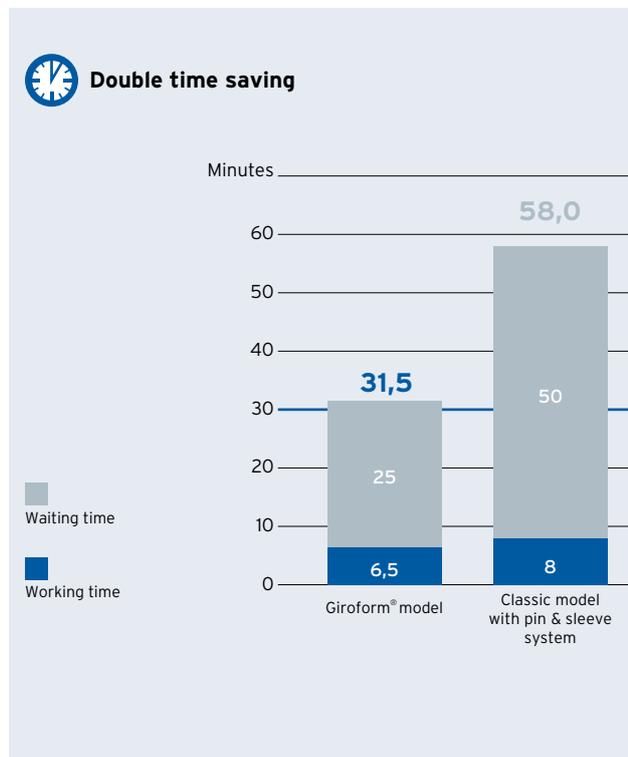
6 After sawing or separating the tooth arch, the pins again fit into the drill-holes.

The cut section serves as an expansion joint to accommodate the expansion, which is now restricted to just the individual segments, thus no longer causing distortion of the tooth arch.

The segmented model therefore offers a precision basis for perfectly-fitting work.

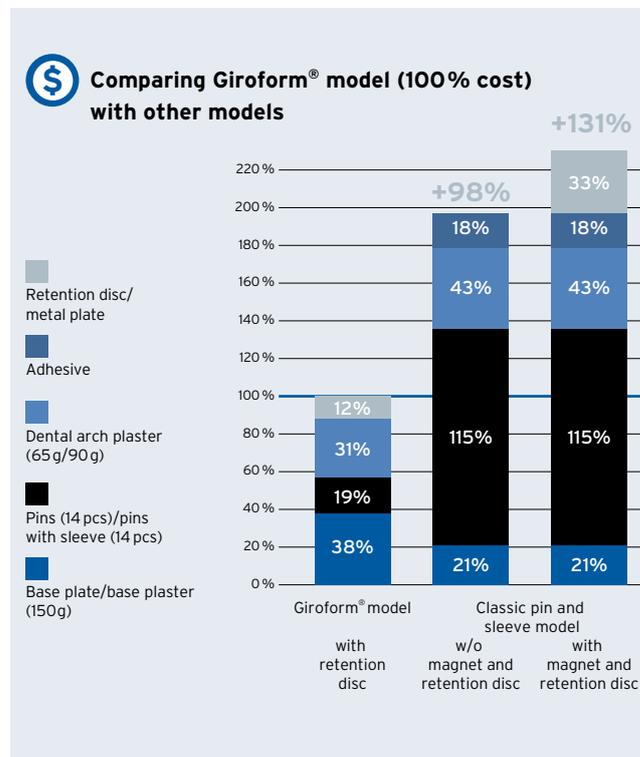
giroform® system

The system which saves double the time



- _The actual time required to make the model is just 6 - 7 minutes
- _The base is manufactured
- _The model can be worked on after only 40 minutes

The system that saves time and material



- _The amount of plaster needed is reduced due to blocking out the impression with Giroform putty
- _The metal disc is already fixed into the premium base plate
- _Multiple use of base plates, secondary plates and metal discs
- _Base plaster no longer required
- _The base plate is cheaper than the base plaster
- _No adhesives, guide sleeves or shell moulds required



giroform® system

Precision, economy, speed



SYSTEM COMPONENTS



YOUR + POINTS AT A GLANCE

+ Precise

- _ Plaster expansion eliminated thanks to individually drilled based plate and segmentation of dental arch
- _ Segments reset in correctly drilled position free of expansion

+ Fast

- _ Model made in just six minutes
- _ The base is ready with the base plate

+ Cost-effective

- _ Less plaster required for the dental arch, no plaster required for the base
- _ The entire base plate is less expensive than the corresponding amount of base plaster
- _ Base plates, secondary plates and metal discs suitable for multiple use

+ Universal

- _ Can be used for saw-cut master models, opposite models, two-part models, anatomical casts, diagnostic models and partial impressions

+ Simple

- _ Simple procedures
- _ Entire system user-friendly with ergonomic design

giroform® pin drill

Perfectly formed, quality appearance, unbeatable performance

The pin drill allows precise, fast and safe determination of the desired drill position.

Drilling starts at the press of a button. The plate holder is fastened magnetically, securing the drill position.

In order to guarantee pin friction, identical, smooth-faced and regular holes are drilled into the Giroform® base plate. The precise drill guide also enables uniform drilling depth. These specific characteristics of the Giroform® pin drill guarantee precise, fast and cost-effective model manufacture.



- _ Fast and easy to use
- _ Laser beam for easy drill positioning
- _ Plate holder smoothly adjustable thus ensuring safe and fast operation
- _ Plate holder is secured magnetically and automatically when drilling starts
- _ Semi-automatic drilling at the press of a button (0,5 seconds per hole)
- _ Automatic drill advance guarantees identical boreholes in the plates
- _ Robust device providing many years of reliability



Strong, practical and aesthetic - stainless steel housing



Laser beam for easy drill positioning



Plate holder is secured magnetically and automatically when drilling starts

giroform® baseplates

Limits the amount of work, base plaster, sleeves and bases thus minimizing costs

Using the Giroform base plate means that the model is already half finished. The base plate is expansion-resistant, saves one working step and prevents plaster expansion.

Prior to using the plaster, the pinhole is set into the base plate, recording the position of the individual segment.

The high-precision homogeneous plate material provides for smooth drill holes and guarantees precise pin guidance.

The flat surface of the base plate enables simple control of the segment position via an easily recognizable light gap. Cost-effectiveness is further increased by the possibility to re-use the base plate and the retention disc.

Saves working time (base plaster, sleeves and moulds). Base plate ready-to-use and available in three sizes

- L for standard cases
- XL for exceptionally large arches
- Quadrant for sectional impressions

Multiple-use of premium plates for opposite models and classic plates

three drill holes for pin fixing if working without a metal disc

Cost savings

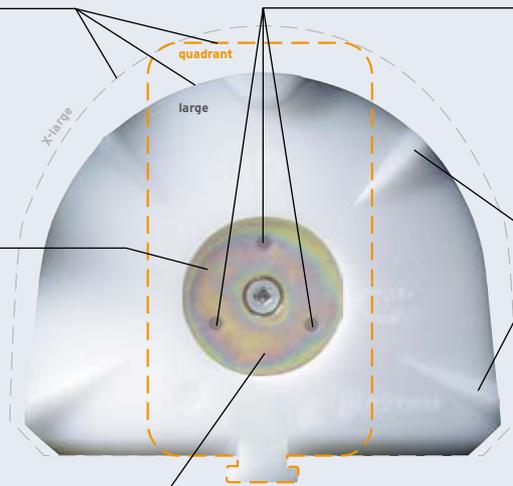
low-priced reusable metal discs for classic base plates

Split cast checked for scientifically verified geometry

triangular split cast with wedge tapering to centre

Screw fitting no longer required saving time

premium base plates incl. metal discs



- _ Using the Giroform base plate means that the model is already half finished.
- _ Inherently stable base plate instead of the risk of secondary plaster expansion due to base plaster
- _ Plate material and the plate strength provide for precise pin guidance
- _ Only minimal amounts of dental arch plaster required
- _ Metal disk and screw are re-usable, instead of using expensive special M8 screws
- _ Flat base plate surface enables individual segment monitoring at a glance
- _ Inclined rear surface facilitates insertion in the plate holder and model removal from the articulator
- _ Base plate can be re-used for opposing model.



Individual segments checked at a glance. Plane surface of the base plate



Multiple use of used, drilled base plates for opposite models and the fixed metal discs as retention discs for anatomical casts. Reusable base plate and metal plate



Slanting facilitates insertion in drill plate holder and removal from articulator - inclined plane on rear of plate



Precision, cost-effectiveness and speed

- _ A combination of carefully matched system components ensures the success of the final product
- _ The following system components play an important part in saving time and plaster while providing a high degree of accuracy



Stability and comfort

- _ Split cast check enables passive (non-magnetic) precision fit to the base plate
- _ The balanced magnetic force and high material strength prevent deformation
- _ The retention pattern on the rear has been optimized to provide excellent grip for the plaster during insertion in the articulator but also its easy removal after use



Straightforward and versatile

- _ The standardized plate size is ideally suited to partial impressions - both left or right quadrant casts. No more trimming or grinding required
- _ Drill holes for pins can be positioned at underside and will thereby facilitating insertion, casting and removal from the articulator
- _ The Vertex® adapter enables direct connection to Vertex® articulators
- _ Also adaptable with the Orbix system with minor alteration



Precise and economically priced

- _ Precision brass pin
- _ With smooth finish on tapered section for accurate fit in base plate hole
- _ With active retention area for perfect grip in dental arch plaster
- _ Reasonably priced



giroform® putty



Economic and re-usable

- _ Permanently applicable soft silicone putty for placing and blocking out the cast on the impression tray.
- _ Saves time with rapid blocking-out
- _ Saves plaster and therefore increases the cost-effectiveness
- _ No subsequent trimming or grinding required
- _ Reusable

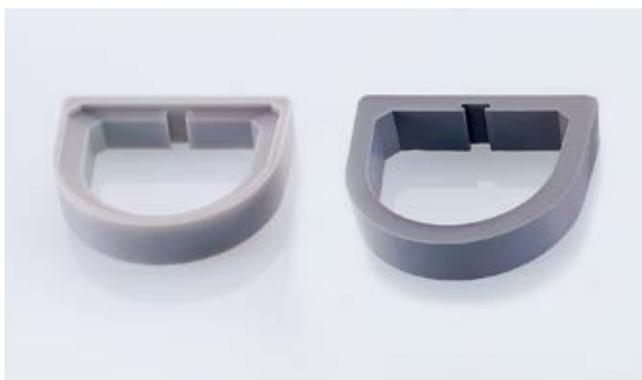
giroform® duplication flask



Versatile and durable

- _ Universal solution for individual refractory dies, several segments or entire dental arch
- _ Ceramic firing pins allow duplicate casts to be made with refractory investment
- _ Saves refractory investment and duplicating silicone by reducing duplication area
- _ The extension of the labial area also allows duplication of protrusive anterior teeth

giroform® base collar



Clever and functional

- _ The vestibular extension allows incorporation of mucobuccal folds and soft tissue on partial prostheses or full dentures
- _ Used Giroform® Base Plates which have already been drilled can be used to make master casts



GOO NZZ SIX DWA CLE

≡ smartbox X2	C 34
≡ smartmix X2	C 35
≡ alpenrock	C 36
≡ artifix [®]	C 37
≡ Stones	C 38
≡ steamer X3	C 39

smartbox X2

The most homogenous plaster dispensing method yet

Weighing and mixing plaster and water by hand is too imprecise and time-consuming by the high standards of the dental laboratory. Aside from ensuring a consistent high degree of dosage precision, the Smartbox is easy to operate and pays for itself within a few months.

Using the new dosage technology, the plaster is sprinkled very finely into the mixing beaker, which noticeably increases the homogeneity of the mixture



- _ Time, material and plaster savings of 20 to 25%
- _ Finely sprinkled plaster using the new patented plaster dosage technology
- _ Multifunctional turn/ push button for simple and quick programming and programme selection
- _ Easy operation - error-free working for everyone
- _ Reproducible mixing ratio at the push of a button, accurate to within a gram
- _ Integrated scales automatically measure the dosage or for manual weighing
- _ Enables clean and dust free operation



Easy to fill the silo at the machine



One switch for everything - multi-functional dial / button



Fine plaster curtain due to new dosage technology



smartmix X2

Perfect mixture results thanks to patented mixing blade geometry and amazingly simple operating concept

The universal and future-proof vacuum-mixing machine with the amazingly simple operating concept.

When processing homogenous plaster, investment material or paste silicon and impression material, the Smartmix vacuum-mixing machine is an indispensable and productive piece of equipment.



- _ Multi-functional dial / button for quick and easy programme selection and programming
- _ Homogeneous, consistent mixing quality
- _ Consistent, reproducible mixtures with optimal parameter
- _ Quick access to all mixing parameter: Mixing duration, speed, direction of rotation, interval times, pre-mixing, pre-vacuum, post-vacuum and program name
- _ Space saving design
- _ Meets the requirements of modern high-performance plasters and embedding masses
- _ Less re-work required due to consistent mixing results
- _ The universal and future-proof, vacuum mixing machine
- _ Beaker with mixing blade 500 ml included

Smartmix mixing beaker

The patented mixing blade geometry of the Smartmix mixing beaker ensures optimal mixing results in all areas of application. By means of both horizontal and vertical revolution of the materials to be mixed, perfect homogeneity of mixture results is achieved



Rounded beaker base for easy cleaning



Patented mixing apparatus geometry, mixing speed up to 550 U/min



Post-vacuum-function



The new generation of super-hard plaster with optimal processing properties

This new generation of class-4 super-hard plaster is highly suitable for the manufacturing of tooth arches, single stumps and control models. Processing and expansion properties perfectly match Giroform® model production processes.



- _ Expansion properties (hardening expansion of only 0.08%) perfectly match Giroform model production
- _ Splinter-free processing and high pressure-resistance
- _ Easy pouring due to shaker effect
- _ Stable without shaker effect (thixotrop)
- _ Comfortable processing through snap-set
- _ Extremely long 7-minute processing period
- _ Rapid completion of hardening after 12 minutes
- _ Rapid final hardness after 35 minutes
- _ Possible to scan, e.g. for strip light scanners such as the Ceramill Map



Three colors: pastel, saffron, gold (see illustration above)



4kg bag - economical storage-stable package size



Easy to handle





White synthetic articulation plaster of outstanding consistency

White synthetic articulation plaster with minimal expansion. This plaster can be mixed both manually and mechanically, and can be applied for a broad spectrum of indications: articulating working models, padding KFO models, fixing the milling base, bite registration as well as for pre-casts.



- _ Quick wetting, no lumping, creamy consistency
- _ Fast setting
- _ Extremely low setting expansion of 0.03%!



Serves to fasten the bite fork to the transfer table



Creamy texture for smooth articulation. Load-free articulation



Sets rapidly

Stones

All Stones at one sight

Technical/physical data:



Application	Plaster for sectioned and master models	Base plaster hard	Base plaster liquid	Plaster for sectioned and master models	High-strength dental stone	High-strength dental stone	Plaster for full denture prosthetics
Product	Alpenrock High-strength dental stone 	Girobase Base plaster	Girobase Base plaster	Girostone® American High-strength dental stone	Girodur Synthetic Superstone	Artifix® Synthetic plaster	Giroplast Synthetic High-strength dental stone
Class	4	4	4	4	4	3	3
Color	gold, pastel, saffron	white	blue	rosé, pastel, yellow	white	white	green, blue white
Mixing ratio (Powder : Water)	100 : 20	100 : 25	100 : 23-25	100 : 22	100 : 23	100 : 30	100 : 30
Sprinkling time (s)	15	15	15	15	15	15	15
Soaking time (s)	30	30	30	30	30	30	30
Mixing time in vacuum (s)	30	30	30	40	30	30	30
Working time (min)	7	2	5	4	5	3	4
Setting time (min)	12	4-6	10	7	10	4	10
Remove from the impression (min)	35	30-45	45	45	25	-	30-45
Linear setting expansion after 2 h after 24 h	0,08	0,05 0,07	0,06 0,08	0,11	0,10	0,03	< 0,20
Compression strength EN 26873 (MPa)	59	< 30	< 50	60	< 50	20	30
Hardness (MPa)	262	120	150	180	< 150	50	80
Bending tensile strength (MPa)	12			12	7	5	
Content (kg)	20 (5x4)	20	20	20	20	20	20
Order no.	71110 71120 71130	711240	711250	711021 711022 711023	711105	711217	711040 711050 711060



steamer X3

State-of-the-art technology and a professional appearance - with Steamer X3, you have a functional and productive auxiliary tool at your disposal in the laboratory

Steamer X3 has all the features that are really needed in everyday laboratory procedures. By focusing on the basics, it guarantees maximum reliability and longevity and thereby enables greatest productivity.



- _ Large capacity tank - 3.7 litres
- _ High-end components offer maximum reliability and productivity
- _ Clear function display, e.g. the minimum water quantity
- _ Rust-proof tank provides extended lifespan
- _ Smooth, rounded surfaces for easy cleaning
- _ Drain valve positioned at the very bottom guarantees complete rinsing of limescale deposits in the tank.
- _ Floor mounted or wall mounted



Steamer X3 is filled without funnel



The ergonomic hand piece is always within reach



Sealing lid without vulnerable pressure control valve



MILLITZ CASTING

≡ ceramill multi-x	C 42
≡ ceramill therm	C 43
≡ ceramill zi	C 44
≡ ceramill zolid	C 45
≡ Legierungen	C 51
≡ noflame ® plus	C 56
≡ smart wax duo	C 57
≡ af 350	C 58
≡ ap 100	C 59

ceramill multi-x

The zirconium oxide winner for a wide range of indications

Vertical milling using the pantograph with unlimited movement, the spherical shells make the Multi-x an indication champion for zirconium oxide.

Completely new indications that have currently only been possible in metal.



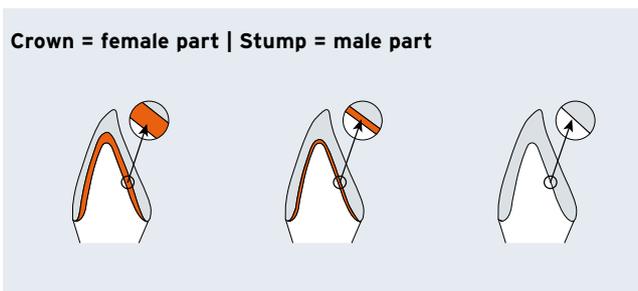
Easy processing of undercuts by tilting the spherical shell table



A easy and highly precise setting of the enlargement factor is feasible by making use of the micrometer screw

- _ Vertical pantograph - even and smooth surfaces also possible in vertical surfaces
- _ Quick and easy to determine the angle of insertion with the moveable spherical shell tables
- _ The vacuum held spherical shell tables and thus the fixing of the milling position may be activated through the foot pedal
- _ Maximum workflow
- _ Variable and precise setting of the enlargement factor using the micrometer screw
- _ Working table fixture for quick blank insertion
- _ Clean processing of the zirconium blank using integrated blast and extraction equipment

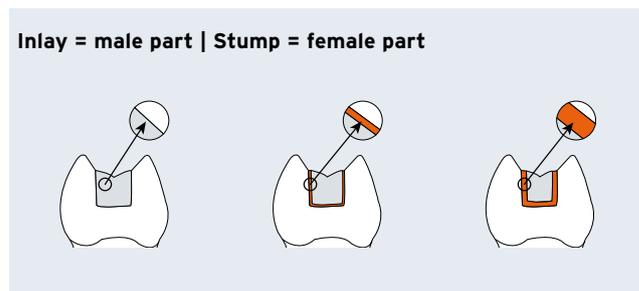
The effect of the enlargement factor



Reduced factor = wider fit

Factor Original factor = ideal fit

Enlarged factor = tighter fit



Reduced factor = tighter fit

Original factor = ideal fit

Enlarged factor = wider fit



ceramill therm

A fully automatic, high performance furnace for the final sintering of stress-free frameworks

The Ceramill Therm is a high temperature furnace with additional features.

The milled Ceramill zirconium-oxide frameworks are dense-sintered with the Ceramill Therm and thus obtain their final density and the resulting excellent material properties. For sintering, the objects are placed onto sintering beads, which ensures a frictionless sintering process and thus distortion-free frameworks. The Ceramill Therm offers maximum process reliability due to constant temperature control, even temperature distribution in the firing chamber and notification in case of termination of the sintering programme due to e.g. power failure. As a result of this, the user is able to safely control if the final density and thus strength of the frameworks has been achieved.

The user has 4 sintering programme locations at his disposal; one of them can be individually programmed.



- _ Maximum process reliability due to constant temperature control, even temperature distribution in the firing chamber and notification in case of termination of the sintering programme
- _ Maximum process reliability due to optimally coordinated, fully-automated sintering programmes for different restoration sizes
- _ 4 sintering programme locations; one of them individually programmable by the user
- _ 2 stackable sintering bowls for maximum utilisation of the furnace
- _ Minimum required space and installation time (supply required)



For maximum utilisation of the furnace, the Ceramill Therm exhibits a large firing chamber, in which 2 sintering bowls can be stacked on each other and thus the double amount of frameworks can be sintered in one cycle. With the aid of the sinter forceps, the sinter shell can be transferred easily and safely in and out of the furnace.



Presintered Y-TZP zirconium-oxide blanks for machining without risk of splintering or damaged edges

Ceramill zirconia blanks already undergo strict test procedures according to fixed parameters during the manufacturing process in our in-house production facility. In this way Amann Girrbach ensures the permanent high-quality standard of its in-house production.

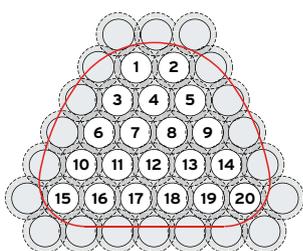
The pre-sintered blanks can be perfectly machined - they do not splinter and offer excellent edge stability. All blanks are marked in batches with their individual enlargement factors, which are later transferred to the milling unit Ceramill.

The blanks are secured in a special plastic frame, which, by simply clicking into place, can be instantly inserted into the fixture within the working table. Thus, the real work can be started without time-consuming preparation.

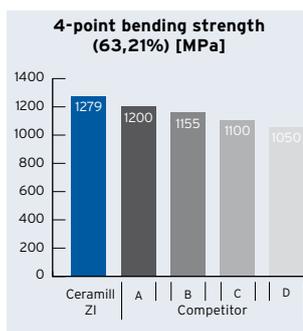


- _____
- TOSOH Powder
- _____
- All Biaxial Pressed
- _____
- 1,300 MPa Strength
- _____
- FDA & Health Canada Approved
- _____
- IdentCERAM Stickers
- _____

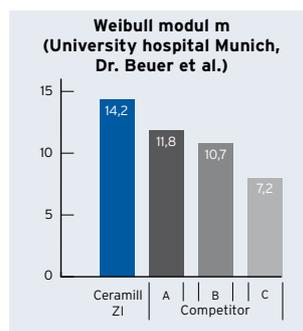
- _ High-grade certified raw material
- _ Extremely high bending strength, optimal edge stability and machinability
- _ Due to their reusability, the blanks can be used efficiently so that unmachined areas can be processed later
- _ Extremely wide range of indications due to different blank sizes
- _ Optimal fitting due to encoded indication of the enlargement factor on the blanks
- _ Individual coloring due to 4 different degrees of brightness of the Ceramill Liquid dyeing solutions
- _ Can be used with all usual zircon veneering ceramics



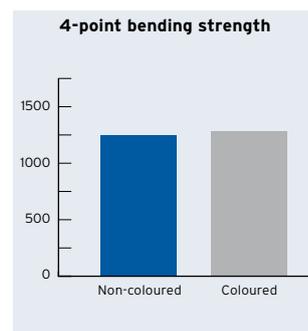
Possible unit per Ceramill Motion blank



At approx. 1300 Mpa flexural strength, Ceramill ZI lies in direct competition with the leading specialists



eramill ZI has an excellent Weibull-modulus of 14.2 and therefore proves a high degree of reliability during use



Flexural strength of Ceramill ZI non-coloured and coloured with Ceramill liquid; Amann Girrbach, 2009





Aesthetics and reliability without compromise.
THE digital system solution for monolithic zirconia restorations.

Permanently stable, non-veneered and aesthetic, ideally suited for all-zirconia crowns and bridges. This is the easiest way to describe the new, material-optimised translucent zircon oxide from Amann Girrbach. This newly developed zircon oxide makes it possible for the first time to produce the required translucent results without increased sintering temperatures, which damage the properties of the material. By maintaining the material-specific standard sintering temperature (1,450 C°) excessive grain growth is prevented, which guarantees the permanent stability of the finished restoration.

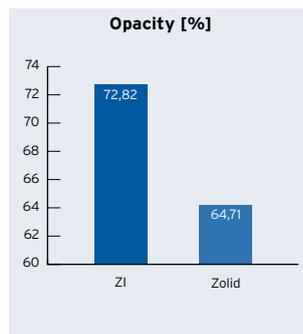


- _ Fabricate fully anatomical zirconia restorations highly efficiently in your laboratory
- _ Non-veneered, without the risk of chipping and easily fabricated
- _ Optimum translucency and light refraction
- _ Sinter temperature analogous to Ceramill Zi
- _ Flexural strength similar to Ceramill Zi

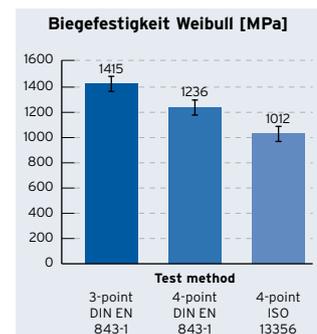
- _____ TOSOH Powder
- _____ All Biaxial Pressed
- _____ 1,200 MPa Strength
- _____ FDA Approved
- _____ IdentCERAM Stickers



Ceramill Stain & Glaze materials are designed so that staining and glazing can be completed in one working stage



Comparison of Ceramill Zolid with Ceramill Zi (Source: Amann Girrbach R&D)



Ceramill Zolid flexural strength up to 1500 MPa (Source: Amann Girrbach R&D)

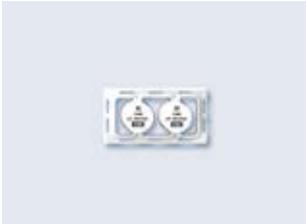
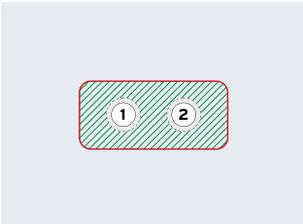
ceramill zi - for Multi-x

Optimum area utilization compared to

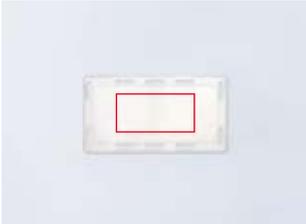
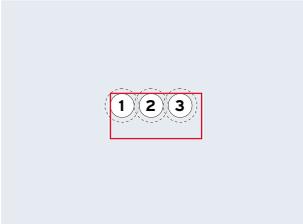
With the Ceramill ZI Blank Preforms, 31, 51, 71 and 77 from Amann Girrbach, the actual blank surface area is also the effective working area. This is due to the holding frame, which allows the framework to be milled up to the outer most edge. The milling path can be outside the blank on all side, i.e. in the plastic frame.

Blank	Holding frame	Area utilization	Advantage
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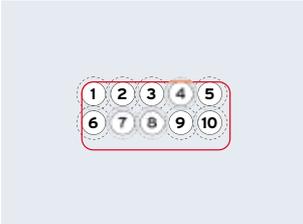
ceramill zi preforms

			<ul style="list-style-type: none"> _ The ideal blank for single copings and abutments _ Available in 2 different sizes _ Single units can be processed in half the time
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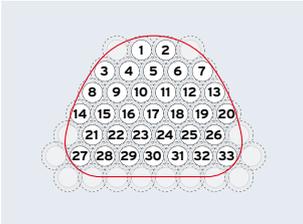
ceramill zi 31

			<ul style="list-style-type: none"> _ The ideal blank for large crowns and small bridges
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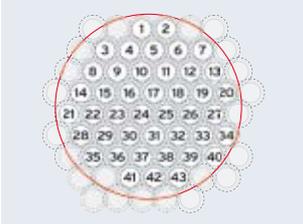
ceramill zi 51L

			<ul style="list-style-type: none"> _ The ideal blank for medium sized to high bridges
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ceramill zi 71L

			<ul style="list-style-type: none"> _ Designed exactly according to the course of the dental arch _ The ideal blank for large spanned bridges _ Covers up to 90% of all work in a laboratory, with no material wastage
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ceramill zi 77 L/XL

			<ul style="list-style-type: none"> _ For all large spanned bridges, which are too wide or high for the ZI 71
---	---	--	---





High-precision, long-life sensing and milling tools for cost-effective machining of Ceramill blanks

- _ Efficient, economically viable processing of Ceramill blanks, with long working life and optimal milling geometry
- _ Available in 1.2mm, 2 mm and 3 mm sizes, and additional special patterns
- _ Material removal and dust removal are optimally controlled due to the tool geometry tailored to the material
- _ Extensive assortment of milling cutters for the management of a wide range of indications

Item no.	Desc.	Geometry sketch	Area of application	
760801 760701	T4 F4		Tools with face radius for rapid, rough removal of material ("roughing").	
760831 760731	T3 F3		Standard tools (face radius) for removing material to create the framework shape and machine the rough outline.	
760821 760721	T2 F2		Standard tools (face radius) for the machining of areas for which the diameter of the T/F3 tools is too large and too the diameter of the T/F1.2 tools is too small, e.g. deep front teeth crowns.	
760811 760711	T1.2 F1.2		Standard tools (face radius) for finishing of details, e.g. incisal/occlusal areas and crown edges. Most of the crown and bridge works can be rendered by means of this tool.	
760809 760709	T0.9 F0.9		Tool with face radius for intricate geometries such as e.g. incisal areas in case of long front teeth crowns. Can also be used as oversize or under-size tool in combination with the 1.2 or 0.6 tools.	
760851 760751	T0.6 F0.6		Thin tool with face radius for particularly intricate geometries, e.g. incisal surfaces of long front teeth crowns, inlays, adhesive bridges, veneers and the like.	
760840 760740	CT2 CF2		2° -tapered tool for machining conical surfaces, e.g. conical crowns and other conical support elements.	
760891 760791	KT2.5 KF2.5		Ball tool for processing undercuts without having to turn/tilt the work piece.	
760892 760792	KT1.8 KF1.8		Fine ball tool for machining tubes and undercuts, without having to turn/tilt the work piece.	
760861 760761	ST2 SF2		Wools without face radius (shank-type tools) are employed for special applications, e.g. implant techniques, bar construction and the like.	
760871 760771	ST1.2 SF1.2		Shank-type tools with a medium diameter for milling special geometries, e.g. for implant techniques.	
760881 760781	ST0.6 SF0.6		Thin shank-type milling cutter for particularly intricate geometries.	
760830 760730	UT3 UF3		Conical tools with a diameter of 3mm for machining sharp-edged undercuts and sharp edges in fine bores.	
760820 760720	UT2 UF2		Conical tools with a diameter of 2 mm for machining sharp-edged undercuts and sharp edges in fine bores.	
760819 760719	TT2 TF2		T-shaped tools with a diameter of 2mm for grinding sharp edged, right-angled undercuts and sharp edges within delicately drilled surfaces.	

Precise friction planes of the presintered blanks

By means of the Ceramill Teleskopkit it is now possible to fabricate telescope crowns with the same precision as in metal. The inverse milling technique performed in the Ceramill machine means milled telescope crowns do not have the connector on the milled surface, but instead on the occlusal surface. This means the friction planes on telescope crowns are already smooth and precise in this pre-sintered state, which reduces the amount of grinding necessary with a water cooled turbine in the finishing phase, and therefore greatly reduces danger of micro-cracking within the material. With the small cylindrical blank for single units, this is a system that saves material and at the same time offers a high degree of accuracy. The Teleskopkit was developed in collaboration with master dental technician Mr. V. Schmidt. From one technician for another one.



- _ It is feasible to produce smooth and precise milled surfaces, in any desired angle, in a pre-sintered state
- _ No connectors on the friction plane, thus reducing the amount of grinding necessary with a water-cooled turbine in the finishing phase, and therefore greatly reducing the danger of micro-cracking within the material
- _ The life expectancy of the prosthetic restoration is increased
- _ The cylinder shaped blank reduces the amount of rough machining necessary
- _ The telescope crowns can be trial-fitted in the patient in the form of resin copings, thus minimizing the need for extensive finishing later
- _ Even staining of the objects
- _ The patient has a greater sense of aesthetical value
- _ The system can be used in both the Ceramill Multi-x and the Ceramill Base



Application of the Teleskopkit in the Ceramill Multi-x



Telescope crowns above: Old production method, below: Production method using the Teleskopkit



ceramill gel



Light-hardening modelling synthetics for crowns and intermediate bridge elements

- _ Cap modelling: Ceramill Gel (green) is of free-flowing consistency for simple dosage and application
- _ Intermediate bridge elements: Ceramill Pontic (blue) has a malleable consistency for rapid, individual shaping
- _ Low shrinkage for high precision and faster work

ceramill uv



Polymerisation lamp with motion sensor for rapid, reliable hardening of modelling synthetics

- _ Proximity on/off switch for convenient use and freedom from glare
- _ Wavelength carefully matched to synthetic material for reliable polymerisation
- _ Audible signal at end of controlled polymerising time means that polymerisation can be accurately reproduced

ceramill aqua



High-precision, light-action parallel milling tool for high-performance ceramics

- _ Rustles milling tool for post-machining of hardened ceramics, with a patented double-joint milling arm
- _ Can be connected via an adapter to any normally available laboratory turbine
- _ Detachable splash guard for efficient results without risk of contamination

giroinvest super

A precise and controllable universal investment with a wide scope of expansion (1.2 to 4.0 percent by volume)

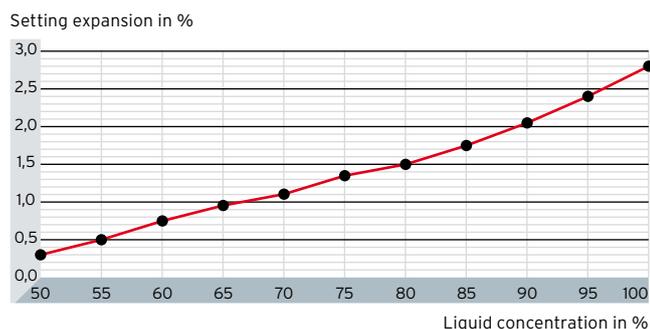
Unique:

Giroinvest Super is an investment suitable for a wide range of applications. It can be used for crown and bridge works, high-gold-bearing, precious metal and non-precious metal alloys. Not only the work becomes noticeably easier and more efficient during the use of this investment; storage is considerably facilitated as well.

By changing the mixing ratio of water and liquid, the expansion range can be variably adjusted from 1.2 to 4.0 vol %. The precise adjustability in the lower and upper expansion area makes this investment perfectly suitable for press ceramics as well as non-precious metal alloys.



- _ For precious alloys
- _ For non-precious alloys
- _ For press ceramic
- _ For inlays, crowns, and bridges
- _ For conventional heating and shock-heat method
- _ Also suitable for ringless systems
- _ Extremely wide scope of expansion
- _ Neat and smooth casting surfaces
- _ Flexible and priceworthy use
- _ Reproducible casting results



Alloys

All alloys at
one sight

	CoCr-alloy	NiCrMo-alloy	CoCr-alloy	Titanium alloy
	Bonding alloys		Model casting alloys	
Product name	Girobond NBS	Girobond CBS	Girocrom FH	Girotan L
Description	The proven classical alloy: carbon-free CoCrMo bonding alloy	Modern NiCrMo bonding alloy for crown and bridge work	The ideal CoCr model casting alloy	Modern Ti6Al7Nb-alloy with unique chemical and physical properties
Features	<ul style="list-style-type: none"> _ Excellent laser welding behavior, no risk of crack development since carbon-free _ High homogeneity within the batches and good reproducibility thanks to the optimized production process _ Suitable for casting with any standard method _ Dense surface, good polishability, rich shine 	<ul style="list-style-type: none"> _ Low hardness (185 HV10) _ High strength _ Good melting and casting properties _ Carbon-free, thus perfectly suitable for laser welding 	<ul style="list-style-type: none"> _ Extra-hard quality, fracture-resistant clasps _ Suitable for modelling delicate frameworks _ Easy to model and polish (fine-grained structure) _ Carbon-free, thus perfectly suitable for laser welding 	<ul style="list-style-type: none"> _ Wider spectrum of indications than pure titanium _ For crown and bridge works _ Also for clasp dentures and suprastructures _ Easy to machine and weld _ Maximum biocompatibility _ Low thermal conductivity and density
Technical/physical data				
Proof stress Rp 0,2 % [MPa]	620	400	700	750
Tensile strength Rm [MPa]	850	650	880	850
Modulus of elasticity E [GPa]	210	180	220	110
Elongation at rupture A [%]	14	45	5	> 8
Vickers hardness HV10	330	185	350	325
Casting temperature [°C]	1510	1410	ca. 1450	
Melting range Solidus [°C]	1350	1270	1346	1650
Melting range Liquidus [°C]	1422	1356	1388	
Density [g/cm ³]	8,6	8,4	8,2	4,52
CTE 25-500 °C [x 10 ⁻⁶ K ⁻¹]	14,1	13,8		10,1
CTE 25-600 °C [x 10 ⁻⁶ K ⁻¹]	14,3	14		
Chemical composition in % by mass				
	Co 62,4	Ni 63,5	Co 59	Ti 87
	Cr 25,5	Cr 24	Cr 32	Al 6
	Mo 5,1	Mo 10	Mo 6	Nb 7
	W 5,2		Si 1,3	
	Si 1,1	Si 1,5		
Other < 1 %	Nb, Fe, N	Nb, Mn	Mn, N, Nb, W	C, N, Fe, H, O, Ta
	CE-certified and free of nickel, beryllium, gallium and carbon		CE-certified and free of nickel, beryllium, gallium and carbon	CE-certified and free of nickel, beryllium, gallium and carbon
Packs				
50g Try-me package	781611	781691	721251	764321 (50 x 20g Ingots)
1000g Laboratory pack	781610	781690	721250	764341 (25 x 40g Ingots)

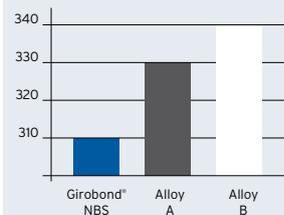


Modern NiCrMo bonding alloy for crown and bridge work

Girobond®NBS is a trailblazing bonding alloy for the crown and bridge technique. The specific composition of this CoCrMo alloy, with fine admixtures but no carbon content, provides optimum properties for outstanding results.

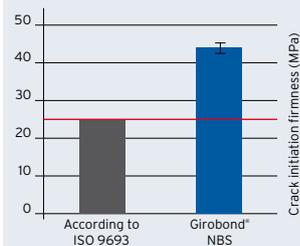
Hardness HV10

Comparison of hardness between Girobond® NBS and conventional non-percious bonding alloys



Comparison of the tensile bond strength of metals and ceramics

Requirement in accordance with ISO 9693



Girobond®NBS metal framework with porcelain facing
Dental lab Müssele, Pforzheim/
Germany

- _ CrMo bonding alloy for the crown and bridge technique, free of nickel and beryllium
- _ Excellent laser welding behavior, no risk of crack development since carbon-free
- _ Also suitable as universal alloy for model-casting clasp dentures, wide-span telescopic cases, and delicate suprastructures
- _ High homogeneity within the batches and good reproducibility thanks to the optimized production process
- _ Suitable for casting with any standard method
- _ Good controllability of the melting and casting process
- _ Easy milling (310 HV10)
- _ Dense surface, good polishability, rich shine
- _ Completely unproblematic and safe facing with conventional facing porcelains which suit the coefficient of thermal expansion of Girobond®NBS 14.1 x 10⁻⁶K⁻¹ (25-500°C)



Melting behavior of Girobond®NBS

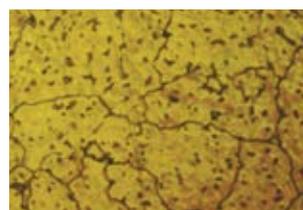
Begin of the melting; the casting cubes melt into each other



The molten metal starts to burst; However, some shadows are still visible



The surface of the molten metal shines; The metal is completely molten - Casting has to be effected immediately



Fine-grained structure of the niobium-dispersed Co-Cr-Mo bonding alloy Girobond®NBS (magnification 100:1)



Coarse-grained structure of a conventional CoCrMo bonding alloy (magnification 100:1)





Modern NiCrMo bonding alloy for crown and bridge work

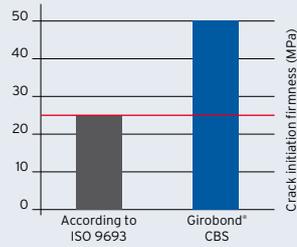
Carbon-free, type 3 NiCrMo bonding alloy for crowns and bridges. Due to the dispersion with Niobium, Girobond®CBS is easy to polish. Biocompatible thanks to the high Mo content. According certificates are available.



Girobond®CBS metal framework with porcelain facing
Dental lab Müssle, Pforzheim/
Germany

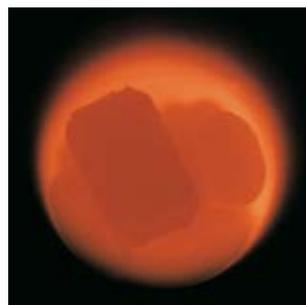
Comparison of the metal to porcelain compound

Requirement in accordance with ISO 9693



- _ Carbon-free NiCrMo-bonding alloy for crown and bridge works (type 3)
- _ Good compatibility and reliability just like NBS, but softer (HV10 185) and thus easier to process
- _ Safe, easily workable, cost-effective material
- _ Optimised production process ensures high homogeneity
- _ Easy to cast by any method
- _ Carbon-free and thus no risk of crack formation; perfectly suitable for laser welding
- _ Due to a TCE value of $13.8 \times 10^{-6} \text{K}^{-1}$ (25–500°C), bonding of veneering ceramics is safe and trouble-free
- _ Corrosion resistance has been proven by the Centre of Dentistry, Oral Medicine and Maxillofacial Surgery, University of Tübingen (Germany)
- _ No overheating of the melt due to melt reflection

Melting behavior of Girobond®NBS/CBS



Begin of the melting; the casting cubes melt into each other



The molten metal starts to burst; However, some shadows are still visible



The surface of the molten metal shines; The metal is completely molten - Casting has to be effected immediately



The ideal denture base alloy for the complete range of removable dental restorations

Extra-hard, suitable for laser welding and easy to model - these are the requirements on a superior model casting alloy. With Girocrom® FH, these requirements have become reality - a carbon-free alloy with excellent mechanical properties.

Laser welding offers dental technicians the advantages of modern joining technology and, at the same time, means maximum biological compatibility to the patient. Due to their carbon content, conventional alloys precipitate carbides during laser welding. These, in turn, have a quality-reducing effect on the welding seams and involve cracks and fractures.

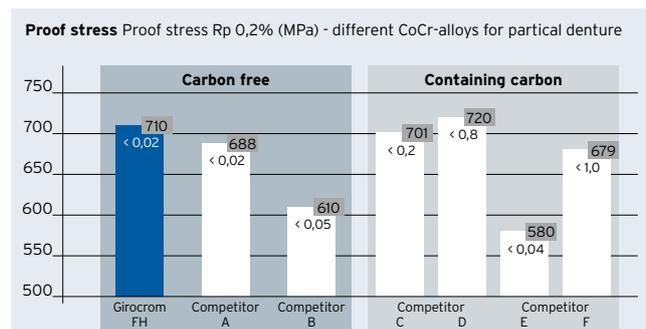


Mandibular model casting denture with clasps, Dental Lab Müssle, Pforzheim/Germany



Girosolder out of CoCr, 3.6g as solder rods
Recommended for soldering of CoCr-Mo alloys

- _ Extra-hard denture base alloy
- _ Improved stability
- _ Suitable for all kinds of removable restorations, e.g. metal denture bases, combined fixed-removable restorations, telescopic cases, dentures with slide attachments or clasps
- _ Easily activated clasps at model casting dentures, with minimized fracture risk
- _ Carbon-free and, thus, ideal for laser welding
- _ Easy processing and polishing; relatively low Vickers hardness HV10 of 350
- _ Excellent biocompatibility and corrosion resistance



Cracks caused by carbide precipitation in a CrCoMo alloy containing carbon



Laser weld without any cracks in a carbon-free CrCoMo alloy



giroinvest speed

The ideal investment for Girocrom® restorations

Giroinvest Speed is a phosphate-bonded precision investment for the model casting technique.



- _ Phosphate-bonded precision investment for model casting
- _ Can be heated up either with the shock-heat method or conventional heating with delay
- _ 30 minutes setting time using the shock-heat method; the mold is subsequently placed into the preheated furnace heated up to a maximum temperature of 1050° C; ready for casting after 60min
- _ Casting without casting ring possible
- _ Smooth casing surfaces and excellent fit due to the shock-heat method
- _ Expansion is regulated by adjusting the liquid concentration
- _ The large 4 kg package size is based on the capacity of the Smartbox Invest and therefore makes storage easier



noflame[®] plus

The “electric Bunsen burner” in the form of compact induction heating replaces the open flame

Within seconds, the modelling instrument is heated up in the coil opening at very low power consumption.

To be used at any place where an electric socket is available.



- _ Mobile and immediately operational, no gas required
- _ Handling as usual, no adjustment required
- _ Eliminates the risks of getting burned or causing fire
- _ No heat emission into the environment; does not consume oxygen
- _ Clean, i.e. no soot particles on instrument and/or material
- _ Saves 75% of energy expenses; saves the environment
- _ Ideal conditions, to be used even at the dental office



Within seconds, the modelling instrument is heated in the coil opening



Replaceable protective caps keep the coil opening clean



smartwax duo

Efficient modeling station for working with two handpieces

This unit is suitable for all kinds of modeling and wax-up work and is unbeatable in combination with the Waxjet when making full dentures. For each handpiece, 3 different temperatures within the range of 50-220°/122-428 F can be programmed and simply switched over. This improves the soft and above all stress-free treatment of the various types of waxes.

In doing so, the excellent thermal conductivity of the instrument alloy used for the probes (more than 20 times the thermal conductivity of stainless steel) plays an important role as well.



- _ Duo-option, i.e. two different handpieces are ready for use at the same time
- _ 3 individually programmable temperatures for each handpiece
- _ Simple and safe exchange mechanism of the modeling tips
- _ Fast operational and heated instruments
- _ Anti-twist cables that are insensitive to heat
- _ Gold plated copper tips for better heat conductivity



Change of probes without the risk of burns - snap on, snap off



Simple adjustment of individual working temperature



Waxjet available as an optional device

af350

Universal use thanks to modular components for surveying, blockout, milling

Stable precision milling device on solid vertical column with ball thread and playless, smooth, double-jointed arm. Milling head with micrometer screw for accurate adjustment of vertical drillings. Integrated control for micromotor, magnetic table with modular design and light connections. Micromotor can be replaced by optional analyzing rod for surveying or block out set for blocking out.



- _ Upgradable to an undercut and surveying machine (optional)
- _ Quick and easy fixing of the double-joint arm with one hand
- _ Automatic retraction of the articulated arm via memory function
- _ Model table can be magnetically fixed in its position automatically by pressing one button
- _ It is possible to fix the model table MT3 at the push of a button in any angle with the patented fixing mechanism
- _ Spring pressure arm resistance for vertical manoeuvrability
- _ Shadow-free illumination with the LED double light fixture

Blockout Upgrade Kit AF350 adjustable for blocking out and surveying

Delivery volume:
Blockout- Set
Marker
Adapter cord, adjustable



Blockout Set



Marker



Adapter cord, adjustable



General-purpose parallelometer

Due to its modular construction it can be upgraded to a full milling machine and blockout device. It has an electromagnetic base plate for fixing the model table, an articulated arm and an analyzing rod. The electricity for the device and the light as well as the continuously variable control for the electrically heated block out set are placed in the base.



- _Upgradable to a blockout device and milling machine.
- _Quick and easy fixing of the double-joint arm with one hand
- _No-play and smooth three-dimensional guidance
- _Automatic retraction of the articulated arm via memory function
- _Temperature control for blocking out with the blockout-set
- _Model table can be magnetically fixed in its position automatically by pressing one button

Milling head for converting the AP100 into a milling machine. The milling head is placed in the articulated arm and its adapter is connected with an existing handpiece.



Milling head



The optional block out set can easily be attached to the analyzing rod



Continuously variable temperature control for block out set



INFORMATION ORDERS



Artex® Typ CN



Artex® Typ CT



Artex® Typ CP



Artex® Typ CR

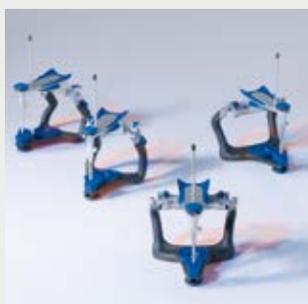


Artex® Typ BN

Artex® Articulators

217360	Artex Typ BN
217310	Artex Typ CN
217320	Artex Type CT
218750	Artex Typ CP
218760	Artex Typ CR

218730	Artex Arcon clip
217330	Modell plate blue (pair)
217331	Modell plate blue, 50 pcs.
215250	Retention Disks, 100 pcs.
299991	Individual engraving on Artex
217333	Support pin C screwable



Dentist Kit

Free choosable Artex articulator, Splitex Plate Set, Artex Facebow, Splitex Transfer Stand

217310, 217320, 218750, 218760	Artex (CN CT CP CR)
216100C	Splitex Plate Set
218600	Artex Facebow
216240	Splitex Transfer Stand



Dentist Mini Kit

Artex Facebow, Splitex Transfer Stand

218600	Artex Facebow
216240	Splitex Transfer Stand



Technician Kit

Free choosable Artex articulator, Splitex Plate Set, Counter Plates, Retention Disk, Splitex Key

217310, 217320, 218750, 218760	Artex (CN CT CP CR)
216100C	Splitex Plate Set
216235	Counter Plates
216150	Retention Disks
216010C	Splitex key





Splitex® Keys

216010C	Splitex key for Artex, 126 mm, C-Version
216010	Splitex key for Artex, 116 mm
216011	Splitex Spacer Plate +10 mm (required for new serial 126mm)

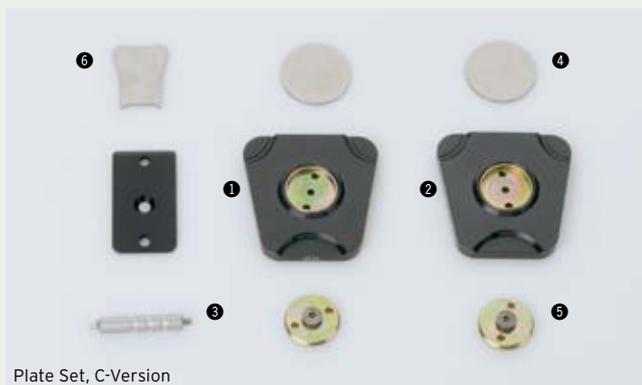


Plate Set, C-Version



Mounting tool

Splitex® Disc Set

216100C	1 - 6 Splitex Plate Set, C-version
216100	Splitex Plate Set (without picture)
216110C	1 Splitex Base Plate (TOP) without magnet
216120C	2 Splitex Adjust. Plate mandibular without magnet
216160	3 1 Magnet Removal Pin, 2/ pkg.
216150	4 Retention Disks, 100 pcs. (Set: 2 pcs. included)
216111C	5 Splitex Magnet (Set: 2 pcs. included)
216112C	6 Assembly wrench
216170	Splitex Screws max./mand.
216140	Splitex Magnets, 6 pcs.
216113C	7 Mounting tool for magnetic holder



Splitex® Counter Plate

The shock-resistant plastic material reliably adapts the Splitex plinth plate without distortion. Both plates are suitable for multiple use. The Premium quality (white) offers a higher accuracy (<10µm!).
 _Always available for quick, precise adaptation at the plinth plate
 _Prevents the risk of ill fit since no plaster expansion takes place
 _Tight, even model fixation, but nevertheless allowing safe removal and reposition

216230	Splitex-Counter Plate, 10 pcs. Premium white
216235	Splitex-Counter plates 100 pcs. Classic black
216150	Retention Disks, Ø 36,5 x 1,5 for Splitex 100 pcs.



Splitex® Starter Kit

216050C	1-7 Starter-Kit C-Version
216010C	1 Splitex key for Artex, 126mm, C-Version, 1 pcs.
216100C	2 Splitex-Plate Set, C-version, 3 pcs.
216150	3 Retention Disks, 100 pcs.
216020C	4 Splitex Mounting Articulator, 1 pcs.
216230	5 Splitex-Counter Plate, 10 pcs.
216200	6 Master platform
743040	7 Artex separating spray
216050	1-7 Starter-Kit



Technical Data
 Dimension: 160 x 160 x 160
 Weight: 700g
 Finish: Aluminium anodized

Artex®/Splitex® Mounting Articulator

The mounting articulator is not used as an articulator, but can be understood as a device which protects this precision instrument. Since models can be freely exchanged between similarly-calibrated articulators, they do not need to be transported in the articulator but can be transferred using mounting articulators which are similarly calibrated to the same model settings.

- _Safeguards articulators against water and plaster dirt
- _Compatible with all types of facebow and transfer systems
- _Centric and vertical height are fixed using rigid hinge axis/incisal pins
- _Easy removal of the models due to a detachable magnet in the upper frame

216020	Splitex Mounting Articulator
216020C	Splitex Mounting Articulator, 126mm Carbon-Version
216021	O-Ring for head support
216031C	Conversion kit for Mounting articulator C-Version
216030C	Anterior guidance pin 126mm C-Version



Splitex® Master Platform Set (1 to 3 parts)

For the production of Splitex Counter plates made from surplus stone. Magnetically connects to the Splitex plates.

216200	① Set, 3-parts
216150	② Retention Disks, 100 pcs.
216211	③ Master platform set
216220	④ Rubber frames for socket
216205	② - ④ Set, 1-part
216141	1 Magnet (built-in)
216221	Rubber frame for socket, low-level



Splitex® Mounting Glue

For the controlled fixing of the mandibular adjustment plate in the articulator. Creates the smallest gap width possible, no shrinkage, safe adhesion.

- _Economical, easy to use, and removable for renewed adjustment

513110	① 50ml Mounting Glue / Loctite
513120	② 150ml Cleaner f. Glued Areas



Artex® Separating Spray

Silicone-based separating spray for Metal, Stone, keeps Articulator and model plates clean.

743040	300ml
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Artex®-Modell Plate

Artex model plates enable easy and quick retaining due to integrated magnets in the upper and lower part of the Articulator. Suited for multiple use.

217330	Modell plate blue (pair)
217331	Modell plate blue, 50 pcs.
215250	Retention Disks, 100 pcs.





Dr. Behrend Type Clinometer

Adjustable Perspex® shield furnished with several vertical lines and two horizontal lines, for transferring physiognomic esthetic parameters. Once adjusted to the facebow, the horizontal lines can be aligned to match the eyes and the line of the anterior teeth, using the rotary control. The tooth position as determined is represented as an angle, and can be transferred to the articulator in the laboratory to recreate the position of the anterior teeth.

- _ Determines asymmetries and compensates them during set-up
- _ Supplies the technician with important esthetic information
- _ Helps to prevent remakes, improves function and esthetics

- 219960C ① "Operatory" Clinometer
- 219950 ② "Laboratory" Clinometer
- 218110C Pin holder
- 217131 Cranked pin for Artex



Centrofix® nach Dr. Lüth

Intra-oral centric registration with vertically adjustable tracing ball: Corrects the vertical distance during registration and locks the determined centric position without plaster by means of an adjustable clamp. German Patent 4014975, US Patent 5.188.529

- _ Time-tested support pin methodology - safe functional results
- _ All relevant information in one session: moulding, jaw relation/vertical distance, axial relation, aesthetics template
- _ Stable and reliable registrations and information for your lab

- 242700 ① - ⑪
- 242710 ① Writing board broad
- 242720 ② Writing board narrow
- 242740 ③ Pin carrier
- 242750 ④ Tracing ball long
- 242751 ⑤ Tracing ball short
- 242760 ⑥ Adjustable clamp
- 242780 ⑦ Cross
- 242790 ⑧ Combination wrench
- 242810 ⑨ Copper writing platelets
- 242820 ⑩ Spirit level
- 242830 ⑪ Distance piece (plastic hose)





Artex® Set-Up Index Key for the maxilla

This facilitates average-value alignment of the edentulous maxilla at the remaining anatomical fold in the throat. The vertical adjustment of the support fork and the reciprocal bar facilitate improved individual positioning of the model.

- _ Semi-individual positioning in the articulator without facebow
- _ Basic version with screw thread, or conversion plate for the Splitex® System

216255C	incl. thread (Thread version) for Carbon-Version
216180	Splitex-Alteration plate



Artex® Set-Up Index Key for the mandible

Fundamental scale for average-value alignment of the edentulous mandible model at the symphysis and retromolar pads.

217700	① with thread
217700C	② 126 mm for Carbon-Version
216250	with Splitex adaption plate
216250C	Setup index key with Splitex, 126mm for Carbon-Version



Artex® Set-Up Templates

Guide for set-up of full dentures according to the Spee/Wilson occlusion curve. The horizontally and vertically adjustable device with occlusal plane indicator and adjustable inclination supports the different templates.

- _ Flat template for average-value mounting of dentulous models
- _ 4 radius for adjustment to different tooth/set-up concepts
- _ Screw or magnet version, to be ordered separately or as a set

217730	Setup template, "thread"
217730C	② Template holder, thread for Carbon-Version
217740	Template flat
217741	Template R 100
217742	Template R 125
217744	Template R 140
217746	Template R 160
217749	Setup templates kit, 6 parts
217749C	① Setup Templates, 6 pcs., 126 mm for Carbon-Version
217731	Support for Setup templates, low-level, Bitex I/II
216260	Setup template with Splitex profile
216260C	③ Template holder with Splitex, 126 mm f. Carbon-Version
216269	Setup template with Splitex profile incl. Support-kit (5 parts, 217740-746)
216269C	ditto, with Template-Set 5 pcs. for Carbon-Version
217702C	Distance piece accessory, screwable (10mm)
216252C	Distance piece accessory, Splitex (10mm)



Ord.-No.	Spherical cap radius	Molar cusps	Tooth type	Tooth manufacturer
217746	160mm	30-35°		
217744	140mm	25-28°	Creapearl	Creation®
			Poly-Star Lux HK Biodent, Articron	Merz Dental De Trey Lindauer Zähne Ivoclar, Weithaas Vita
			Orthognat	
217742	125mm	15-16°	n, t, k, Odilux	
217741	100mm	0°	Orthocal	Lindauer Zähne





Artex® Anterior Guidance

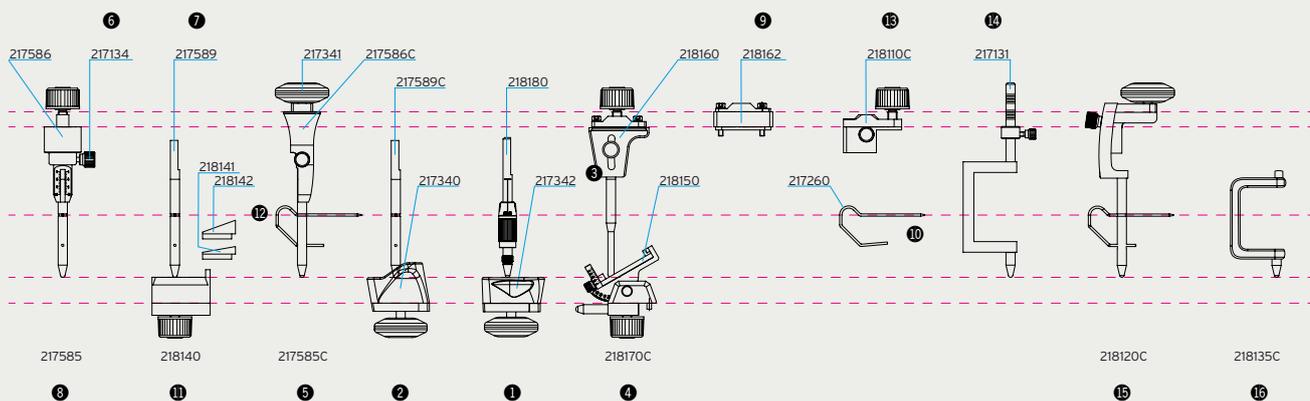
Special accessory which fits in all Artex® Articulators, to mechanically individualize/program the anterior area.

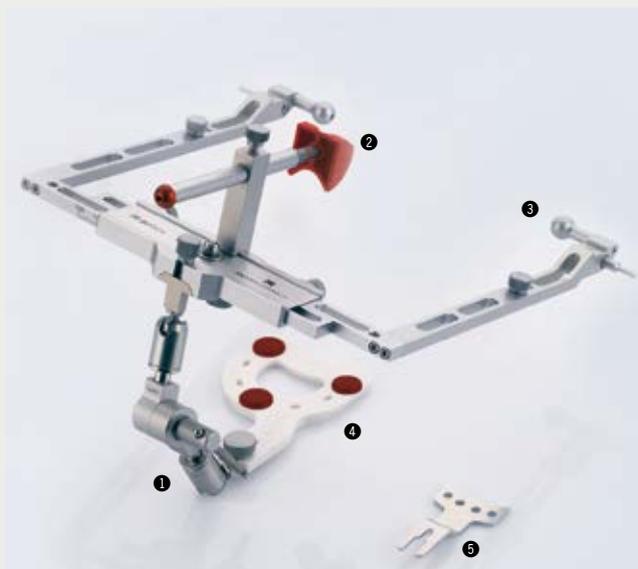
_Micrometer pin to exactly raise/lower the anterior guidance in steps of 1/10 mm

_Individual anterior guidance using radially guided pin with infinitely variable table plate (protrusion 0-40°, laterotrusion 0-70°, turning to right and left)

_Cranked pin provides for unhindered access during anterior set-up and maintains clear sightlines

- 217586 ⑥ Support pin
- 217586C Anterior guidance pin for Carbon-Version
- 217589 ⑦ Anterior guidance pin
- 217589C Anterior guidance pin, C-Version
- 217585 ⑧ Anterior guidance pin complete
- 217585C ⑤ Anterior guidance pin for Carbon-Version
- 218170C ④ Individ. anterior guidance, 0-70° protrusion, 0-40° laterotrusion pin, table, adjusting bolt for Carbon-Version
- 218162 ⑨ Heightener 10 mm for radial pin
- 218120C ⑮ Radial pin, C-Version
- 218135C ⑮ Radial pin attachment angled
- 217260 ⑩ Artex Incisal needle
- 218140 ⑪ Artex Incisal plate incl. 218141, 218142
- 218141 ⑫ Table adapter 10°
- 218142 ⑫ Table adapter 20°
- 217340 ② Plate anatomical for Carbon-Version (40° protrusiv; 30-40° laterotrusiv)
- 217342 ① Standard incisal plate 0° for Carbon-Version
- 218110C ⑬ Pin holder
- 217131 ⑭ Micrometer pin
- 218180 ③ Micrometer pin Artex





Artex® Facebow €

- 218600 ① - ⑥
- 218620 ① Joint Support
- 218680 ② Leipzig Nasion
- 218607 ③ Porus Buttons "Standard", pair
- 217650 ④ Artex Quickbite, 10 pcs.
- 217928 ⑤ Tray Handle

Optional accessory:

- 218609 Porus Buttons long, pair
- 218610 Axis-plane Pointer w. screw
- 218635 Carrier for Facebow Cadiax compact, pair
- 218690 Nasion vertically adjustab.
- 217650 ④ Artex Quickbite, 10 pcs.
- 217928 ⑤ Tray Handle, 5/pkg.
- 217611 ⑥ Bite fork partial two-pack



Impression Compound €

Thermoplastic for facebow registrations and centric bite impressions.

- _Soft plastic condition below 55°C
- _Clear and precise performance without any deformation
- _Quick transition to solid consistency

- 463450 Impression Compound 115g pack/15 bars



Bite Tabs €

Thermoplastic pellets on self-adhesive foil to cover the metal bite fork for facebow registration.

- 642150 180 Tabs



Artex® Transfer Stand

For safe transport of the facebow registration to the lab. The universal joint with bite fork is removed from the facebow and inserted into the reception of the transfer stand. There, the registration is fixed in plaster. The detachable transfer table safely and unshakeably takes this important patient information to the lab.

- 218670C ① Transfer Stand with table for carbon version
- 216240 ② Splitlex Transfer Stand complete





Artex® Transfer Table

The detachable part of the transfer stand, either with screw for model plates or furnished with Splitex magnetic plate. Several transfer tables are necessary in case of short registration intervals (whereas only one facebow and one transfer stand are required).

- _Saves money since only one facebow is sufficient
- _Saves plaster work at the practice but ensures safe transport to the lab

217671C ❶ Transfer Table for carbon version

216270 ❷ Transfer Table with Splitex Profile



Artex® Transfer Jig

Another direct alternative to the transfer stand and to the direct facebow transfer. The universal joint with bite fork is attached to the jig holding the registration in axis relation while fixed at the bottom part of the artex articulator.

- _Direct and safe model transfer without additional steps
- _Reasonable solution at the practice - saves one "plaster cycle"

218631



Artex® Bite Fork Support /Telescoping Legs

Infinitely variable bite fork support (see picture above). The magnetic plinth is compatible with all conventional articulators.

- _Fits all types of articulators, either fixed with screw or magnetically
- _Height adjustment by means of a thread, fine adjustment by telescopes

The telescoping legs are screwed in to support the facebow anteriorly during the direct transfer of the facebow registration into the articulator. A level helps to adjust the facebow horizontally to the table plane.

217685 Bite Fork Support

217624 ❶ 2 Telescopic Legs ❷ + Level



Artex® case

217991 Artex case with foam rubber padding (without content)



Artex® iTero

The Artex iTero model adapter set enables direct transfer of a set of models created from iTero scan data to the Artex Carbon articulator.

216310 Artex iTero model adapter (set)



Technical Data
Dimension: 67 x 35 x 46
Weight: 157 g

Artex® Noplast

Artex® Type NK for easy mechanical model fixation without plaster. The freely movable model plate safely holds the model in place according to the conventional method with a model table. With help of female thread screws, bars/joint discs rigidly block the relation, strain-free and distortion-free.

- _ Time-saving interim solution for model analysis/discussion
- _ For the making of individual trays/templates and for orthodontic apparatuses
- _ To check the function of Co-Cr cases on investment models
- _ Spares valuable working articulators if used for interim steps (but it may not, and cannot, replace the model plaster for definite restorations!)

- 217460 Noplast upgrade kit (OK/UK carrier)
- 217480C Noplast for Artex Carbon



Spray marker

Green occlusion spray with food-grade ingredients. Develops only little spray-dust, fully water-soluble.

- _ Homogenous spray pattern
- _ Allows for precise dosing
- _ High selectivity

- 541390 Spray marker green, 75 ml



1
Technical Data
Dimension: 120 x 90 x 110
Weight: 480 g
Finish: Alluminium anodized

Artigator

For the expert and artistic processing of the "triple-tray technique" by the dental technician. This way allows to directly transfer the impression into the position-safe auxiliary Artigator articulator, regardless of the cranium/axis relation.

- _ Sturdy unit with safe centric and Artex® "click" lock
- _ Performs average-value movements as well as immediate sideshift (ISS)
- _ Full frontal access for proper adjustability thanks to the crank pin
- _ Direct segment model in magnetic pin plate
- _ Replaces four work steps with one, saves half the plaster consumption
- _ Quick amortization due to enormous time and material saving

- 218950 **1** Artigator incl. 2 Base Plates blue

Accessory:

- 218941 **2** Artigator - Base plate blue, 50 pcs.
- 218933 **3** Artigator base collar
- 218934 Artigator incisal pin
- 218935 Artigator Support pin
- 218940 Artigator centering key
- 218949 **4** Artigator Trennspray / 1 l
- 218931 **5** Artigator pin plates U (upper)
- 218932 **5** Artigator pin plates L (lower)





Technical Data
 Dimension: 250 x 183 x 370
 Weight: 9,6kg
 Mains supply:
 230(100/115)V/0,32W
 Motor speed: 2.800min⁻¹
 Laser class: 3A < 5mW

Giroform® Pin Drill

176700 Giroform Pin Drill
Delivery volume: Tungsten carbide burr 176710, plate support - L 176712, impression carrier 176733, Tubular socket wrench 176702, holding pin 176703, screw driver for adjustment 176004

- 176710 Giroform-Tungsten Carbide Burr
- 176712 Giroform-attachment for plates L
- 176733 Giroform-Impression carrier

Accessories:

- 176712 Giroform-attachment for plates L
- 176722 Giroform-attachment for plates XL
- 176711 Giroform-attachment for plates Quadrant



Giroform® Starter Kit

- 576702 Giroform-Starterkit
- 176710 ❶ Tungsten carbide burr
- 176733 ❷ Impression Carrier 2x
- 321070 ❸ NT-Cutter
- 359010 ❹ Hammer with Aluminium handle
- 576450 ❺ Giroform-Pins, 1.000 pkg.
- 576461 ❻ Giroform putty 1kg
- 576710 ❼ Giroform base plate Premium +, 100 pkg.
- 5767501 ❽ Giroform secondary plate 5x
- 576765 ❾ Adjustment plate clear, 2 pkg.
- 576950 ❿ Giroform sleeve "kombi"
- 576805 ⓫ Giroform space retainer foil, 50 pkg.
- 815300 ⓬ Arbor band mandrel 2.35mm
- 815330 ⓭ Arbor band, grain 120, 50 pkg.
- 990252 ⓮ Timer

576702INT Giroform Starter Kit International
 = Starter Kit 576702 + Classic Plate 576720 (10 pcs.),
 Magnets 512511 (10 pcs.), Sockets 512512 (10 pcs.),
 576716 Magnetic plates incl. screw (10 pcs.)



Giroform® Base Plates, 100 pcs.

- 576710 ❶ Giroform Premium+ L, 100 pcs.
- 576745 Giroform Premium+ XL, 100 pcs.
- 576720 ❷ Giroform Classic L, 100 pcs.
- 576740 Giroform Classic XL, 100 pcs.
- 576726 ❸ Giroform Classic L blue, 100 pcs.
- 576765 ❹ Giroform adjustment plate L, 2 pcs.
- 576766 Giroform adjustment plate XL, 2 pcs.



Giroform® Secondary Plate

- 576750 L with Magnet, 50 pcs.
- 576751 XL with Magnet, 50 pcs.



Giroform® Pins

- 576450 1.000 pcs.
- 576451 10.000 pcs.



Giroform® Quadrant Base Plate

Shape retaining acrylic base plate for Quadrant impressions.

576770 Giroform Quadrant base plate, 100 pcs.

576771 Giroform adjustment plate for Quadrant, 2 pcs.



Giroform® Adapter for Vertex®

Adapter for usage in the Giroform base mounting plates in Vertex single-use articulators.

576790 Giroform adapter for Vertex articulators, 100 pcs.

Vertex® is a registered trademark of Dentsply Ceramco



Giroform Starter Kit Quadrant

576702Q Giroform Starter Kit Quadrant contains:

176711 Giroform-attachment for plates Quadrant

576770 Giroform Quadrant base plate, 100 pcs.

576771 Giroform adjustment plate for Quadrant, 2 pcs.

576790 Giroform adapter for Vertex articulators, 100 pcs.

Vertex® is a registered trademark of Dentsply Ceramco



Giroform® pin drill

Conical hard metal drill, cutting geometry perfectly matches the giroform base plate material.

_Short chips smooth cladding

176710



Giroform® Putty

Silicone putty for placing and blocking the mould on the mould carrier, saves plaster as well as subsequent trimming and grinding, pleasant lemon fragrance.

_Great time-savings as a result of quick blocking

576461 1kg tub

576465 5kg bucket



Giroform® Magnets and Sockets

Magnet Ø 31.9 x 6 mm, including socket and retention disc. Allowing removal of the model and reposition in the articulator. Independent system use.

512500 Magnets with Sockets and Retention Disks, 10 pcs.

512511 Magnetic plates 100 pcs. Ø 20 x 6 mm

512512 Sockets 100 pcs. Ø 25 x 7,5 mm





Giroform® magnetic discs

- ❶ Edged, Ø 31.9 x 1.5 mm for universal usage,
- ❷ Stainless steel flat, edged Ø 36.5 x 1.5 mm for Splitex counter plates
- ❸ Ø 25 x 1.0 with centric bore and M3-countersunk screw for Giroform Classic base plates

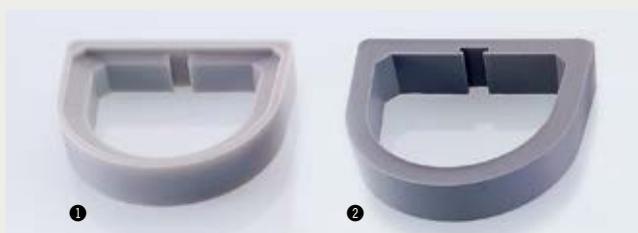
215660	❶ Retention Ø 31.9 x 1.5	100 pack
216150	❷ Retention discs stainless steel Ø 36.5 x 1.5 for Splitex	100 pack
576716	❸ M3-Retention discs for Giroform Classic Ø 25 x 1.0	100 pack incl. screws
576717	Screwdriver for retention screws	



Giroform® Space retainer foil

Provides enough space for pins and magnet. Stabilizes the base plate in the area of the splitcast profile.

576805	50 pcs.
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Giroform® Base Collar

Used Giroform® Base Plates which have already been drilled can be used to make master casts.

576950	❶ Base Collar L-Kombi
576961	❷ Base Collar XL



Giroform® Duplication Flask

For the duplication of refractory dies varying in size from single segments up to the complete dental arch. Suitable for Giroform® base plate L.

576670	
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Giroform® Refractory Pin

Removable conical ceramic pins, inserted into the base plate, are used in refractory duplication.

576480	Giroform Refractory Pin, 25 pcs.
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Giroform® Labels

909032	1000 pack
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Technical Data
 Dimension: 335 x 240 x 590
 Weight: 16,5kg
 Mains supply:
 100/115/230 V, 50/60Hz
 Machine rating: 95W
 Capacity powder: ca. 8kg
 Time to allot 20ml : 100g appr. 30s

Smartbox X2

116170 Smartbox X2
 230 V (115 V = 116170V115)

Delivery volume: Basic unit with integrated 8kg plaster container, 3 l water container, power cable

116101 Protection cover

117201 Beaker distance piece (2 items)



Technical Data
 Dimension: 250 x 160 x 350
 (without stand)
 Weight machine: 8,5kg
 Weight stand: 7,9kg
 Mains supply:
 100/115/230 V, 50/60Hz
 Machine rating: 210W
 Delivery rate: 15,8l/min
 Vacuum power: -800mbar

Smartmix X2

115700 Smartmix wall mounting 230 V

Delivery volume: basic unit with beaker 500ml, for wall-mounting, drilling template, 4 screws with dowels, 1 replacement filter

115730 Stand for Smartmix X2

115620 Beaker with mixing blade 100ml

115630 Beaker with mixing blade 250ml

115640 Beaker with mixing blade 500ml

115650 Beaker with mixing blade 750ml

115660 Beaker with mixing blade 1000ml

115631 Beaker 250ml

115641 Beaker 500ml

115651 Beaker 750ml

115661 Beaker 1000ml

115701 Spare filter for Smartmix X2, 5 pcs.





Alpenrock

The new generation of Class 4 high-strength dental stone for fabricating dental arches, single dies and check models. The expansion is ideally matched to Giroform model fabrication.

711110	gold	20 kg carton (5 x 4 kg-Bag)
711111	gold	1 x 4 kg-Bag
711120	pastell	20 kg carton (5 x 4 kg-Bag)
711121	pastell	1 x 4 kg-Bag
711130	safran	20 kg carton (5 x 4 kg-Bag)
711131	safran	1 x 4 kg-Bag



Artifix®

White synthetic articulation plaster with minimum expansion, suitable for manual and machine mixing. Indication: working models articulating, orthodontic models rebasing, fixation of milling bases, bite registration and indexes.

- _Covers quickly, does not clump, creamy consistency, sets quickly
- _Low setting expansion: 0.03%!

711217	20 kg carton
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Girostone®

American natural super-hard plaster, class 4, universal for all prosthetic applications, material of choice for situation and master models - also for fully prosthetic working models due to its low brittleness.

- _Cost-efficient high-quality natural super-hard plaster in 3 colours

711021	rosé	20 kg carton
711022	pastell	20 kg carton
711023	yellow	20 kg carton



Girodur®

Synthetic class 4 super-hard plaster for stump and master models.

- _Low-price alternative to all precision model types

711105	white	20 kg carton
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Girobase

Class 4 base plaster for precision saw-cut model in solid (white) or liquid (blue consistency).

- _Optimal flow properties, 2/5 min (white/blue) processing time
- _Little expansion, smooth surface, high final hardness

711240	white (solid)	20 kg carton
711250	blue (liquid)	20 kg carton



Giroplast

High-strength synthetic plaster for full prostheses, especially for plastic extrusion techniques (e.g. polyan). The great working pressure during insertion of the plastic material into the container requires high pressure-resistance to counteract deformation.

- _High strength for plastic extrusion
- _Expansion values adjusted to full prostheses

711040	green	20 kg carton
711050	blue	20 kg carton
711060	white	20 kg carton



Giroform® Die Link

With Giroform® Die Link, AmannGirrbach presents a series of air-drying die varnishes which, for the first time ever, contain innovative chemical primer components as well as nano particles. These new ingredients ensure excellent bonding of Giroform® Die Link to dental plasters or stones and provide smooth and scratch resistant surfaces of the die varnishes optimized for dental technology. The superthixotropic consistency of Giroform® Die Link guarantees an even, homogeneous layer thickness.

Giroform® Die Link - Die Varnishes

- _ Giroform® Die Link is available in 5 colors and in 5 different layer thicknesses (between 0µm - hardener - and 20µm)
- _ High bond strength to the die thanks to primer technology
- _ No flaking-off during steamcleaning
- _ The smooth, homogeneous surface allows easy removal of the wax modellation
- _ Thanks to the high scratch resistancy, the surface is almost undamageable
- _ The superthixotropic behaviour of Giroform® Die Link allows to evenly apply the varnishes all over the die
- _ No multiple applications on the edges
- _ No drop formation

Giroform® Die Link Hardener (0µm) with color indicator

- _ Safety and control during the application of the hardener thanks to the colour indicator
- _ No multiple applications

Color	blue	grey	gold	silver	red
Layer thickness	20 µm	20 µm	15 µm	13 µm	8 µm

782110	Giroform Die Link Hardener	(0µm) 15 ml
782111	Giroform Die Link Hardener clear	(0µm) 15 ml
782120	Giroform Die Link blue	(20µm) 15 ml
782130	Giroform Die Link grey	(20µm) 15 ml
782140	Giroform Die Link gold	(15µm) 15 ml
782150	Giroform Die Link silver	(13µm) 15 ml
782160	Giroform Die Link red	(8µm) 15 ml
782170	Giroform Die Link Thinner	



Giroform® Die Link Lube insulation

Insulates the plaster model from wax and is specially adjusted to Die Link matte varnish.

- _ Insulates also when used sparingly
- _ Non-alcoholic and solvent-free
- _ Water-soluble
- _ Non-reactive with embedding mass

782180	Giroform Die Link Lube, insulation	15 ml
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Giroform® Die Link Starter-Set

782100	Giroform Die Link Starter-Set	
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Content: 1x Giroform Die Link Hardener, 1x Giroform Die Link blue, 1x Giroform Die Link grey, 1x Giroform Die Link Thinner, 1x Giroform Die Link Tray





Abrasive belt / mandral

For pre-trimming of model stumps and trimming of tooth arches.
 _ Quick, efficient and vibration-free removal of material

815300	mandral cylindrical		
815310	grain 80	50 pack	ISO 070, length 11mm
815330	grain 120	50 pack	ISO 070, length 11mm
815340	grain 240	50 pack	ISO 070, length 11mm



Model boxes / model cases

Deep-drawn transparent box for transporting dental models, self-locking, with 2 foam rubber cushions.

_ Various sizes and heights, also for plastic bases
 _ Cost-efficient bulk packaging of 30 pieces each (10x3 units)

511430	small	(78 x 70 x 45)
511450	large	(90 x 80 x 60)
511460	x-high	(90 x 80 x 80)
511470	x-large	(100 x 90 x 90)
511540	①	model case



Girosolve Pro

Plaster dissolution with high dissolving speed and capacity, for all kinds of plasters and plaster-bonded investments. Dissolves and removes plaster remainders from dentures, impression trays, mixing bowls, and cast objects.

_ Higher effectiveness and economy - increased by 20%, control through bubble activity
 _ No acids, neutral pH-value, suitable for all materials
 _ Efficiency multiplies if used in an ultrasonic bath
 _ Disposal of used solution through the sewage system

714050	Girosolve Pro, 2l
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Technical Data

Dimensions: 406 x 280 x 423
 Weight: 16 kg
 Electrical connection values (V/A/Hz):
 230/3,6/50-60, 115/7,0/50
 Performance: 1000W
 Volume: max. 52 dbA
 Filter bag size: 10 Liter
 Hose diameter: 38 mm
 Hose length: 1,8 m
 Adapter diameter: conical, 37-38 mm
 HEPA micro filter (97,97%),
 Filter class H12, dust class M

Ceramill Airstream

_ Extractor for Ceramill Motion, Multi-x
 _ May also be used for other devices with attached adapter

178600	Ceramill Airstream 230V (100-120V = 178600V100-V120)
178610	Airstream Suction Bag (5 pcs.)
178611	Airstream Microfilter (1 pcs.)



Steamer X3

116910 Steamer X3 230 V

Delivery volume: Mounting template, Instruction for use, Test strips for measuring water hardness, 1 x 250 ml bottle of Kalk-X descaling liquid Power cord, Set of safety cap gaskets (white teflon gasket and silicone gasket)

Optional accessory:

- 116811 Kalk-X Liquid descaling agent (4 x 250ml)
- 516330 Clean Steamer
- 516340 StymoNet
- 116911 Sealing lid
- 116912 Seal for lid

Technical Data

Dimension: 275 x 265 x 455
 Weight: 12,5 kg
 Mains supply: 230V/50 Hz /115V/60 Hz
 Machine rating: 1600W / 1000W
 E-fuse: T10A
 Boiler volume: 3.7 l
 Vapor pressure: 4.0 bar
 Warm-up time: approx. 25min



CleanSteamer

Hollow cylinder with hinged lid and sieve portion to collect impure small parts (teeth, crowns, etc.). By opening the hinged lid, saturated steam is blown into the object carrier. Addition of dishwashing liquids possible.

- 516330 CleanSteamer
- 516338 Steamer X3-adapter

Spare parts:

- 516332 Lid handle insulation
- 516333 Steam inlet insulation
- 516334 Hinged lid insulation



StymoNet

Self-locking tweezers with fine-mesh stainless plastic net to fix delicate objects such as ceramic teeth; inlays etc. during cleaning with saturated steam.

- 516340 StymoNet





Ceramil Multi-x

178500 Ceramil Multit-x (complete machine)

Delivery volume: Milling/sensory unit (vertical pantograph on radial guide), Table unit (spherical shell table), Balancing weights for the spherical shells, Foot switch for fixation of the table (vacuum), Motor unit including collet wrench 3mm, LED double illumination, Aspiration adapter, Connector for central or single-place aspiration, Dust protection cover (1 piece), Support plates for model and blank 31/51, Positioning aid 31/51, Calibration plates for model and blank, Spirit level for adjustment of the table including mounting pegs

Accessories:

- 178600 Ceramil Airstream 230V (100-120V = 178600V100-V120)
- 178518 Dust protection cover for milling side, Multi-x, 2 pieces
- 178127 Dust protection cover for milling side, Base, 2 pieces
- 178139 Counterweight milling arm, 1 piece
- 178519 Knurled screw for scanning side

Technical Data:

D/B/H: 498 x 398 x 450 mm
 Required head space for moving: 560 x 480 x 450 mm
 Weight: 31,5 kg
 Electr. connected load: 230/115/100 V 50/60Hz
 E-fuse: T1A
 Output: 125 W
 Compressed air connection: 6 bar max. 50l/min

Variable engine speed: 1.000 - 35.000 min⁻¹
 Torque: 7,5 Ncm
 Voltage of lamp connection: 12 V
 Output of lamp connection: 20 W
 Collet chuck: ø 3 mm
 Sound level: max. 65 dbA
 Tipping angle Spherical shell table: ca. 19°



Ceramil Material-Starterkit

760011 Delivery specification: see label ★



Ceramil Teleskopkit Starterset

760500 Starterset

Delivery volume: Ceramil ZI TC L (12 blanks), Telescope-Kit Blank holding plate (1 pcs.), Telescope-Kit Model holding plate (1 pcs.), Telescope-Kit Model holding pins (1 pcs.), Ceramil Roto TCTO, Ceramil Roto TCFO, Ceramil Roto TCT1, Ceramil Roto TCF1, Ceramil Roto TCT2, Ceramil Roto TCF2

Accessories:

- 760110 Ceramil ZI TC L (12 blanks)
- 760501 Telescope-Kit Blank holding plate (2 pcs.)
- 760502 Telescope-Kit Model holding plate (1 pcs.)
- 760503 Telescope-Kit Model holding pins (5 pcs.)
- 760504 Ceramil Roto TCTO
- 760505 Ceramil Roto TCFO
- 760506 Ceramil Roto TCT1
- 760507 Ceramil Roto TCF1
- 760508 Ceramil Roto TCT2
- 760509 Ceramil Roto TCF2



1



4



2



5



3



6



7



8

Ceramill ZI - Y-TZP

For use with Ceramill Base und Multi-x

760101	1 Ceramill ZI Preforms 12 blanks h = 16 mm	★ 1x
760102	1 Ceramill ZI Preforms L 12 blanks h = 20 mm	
760116	2 Ceramill ZI 31 zirconium-oxide blanks, 40 x 20 x 16mm, pack of 6	★ 1x
760143	3 Ceramill ZI 51L zirconium-oxide blanks, 65 x 30 x 20mm, pack of 3	★ 2x
760184	4 Ceramill ZI 71L zirconium-oxide blank, dental arch shape, h = 20mm, pack of 1	
760175	4 Ceramill ZI 71XL zirconium-oxide blank dental arch shape, h = 25mm, pack of 1	

Blanks and frames for use with Ceramill Base

760185	5 Frame for blank ZI 71 (multiple use), pack of 1	
760181	6 Ceramill ZI 77L zirconium-oxide blank 98 x 20mm, pack of 1	
760183	6 Ceramill ZI 77XL zirconium-oxide blank 98 x 25mm, pack of 1	

Blanks and frames for use with Ceramill Multi-x

760188	5 Frame for blank ZI 71 (multiple use), pack of 1	
760186	6 Ceramill ZI 77L zirconium-oxide blank 98 x 20 mm, pack of 1	
760187	6 Ceramill ZI 77XL zirconium-oxide blank, 98 x 25 mm, pack of 1	

Ceramill Zolid

For use with Multi-x and Base

760166	7 Ceramill Zolid 71 L, h = 20 mm, 1 pcs.	
760167	Ceramill Zolid 71 XL, h = 25 mm, 1 pcs.	

Accessories:

760998	Zolid instruction tutorial (MP4 video disc)	
920150	8 Atlas of Anatomy, desktop flipchart manual of tooth forms by Knut Miller	



Ceramill Stain & Glaze Kit (set of painting colours)

Stains and glaze powders for customising zirconia.

760350	Ceramill Stain & Glaze Kit, 12 pcs.	□ 1x
Content:		
760351	Ceramill Stain yellow 4g	
760352	Ceramill Stain orange 4g	
760353	Ceramill Stain blue 4g	
760354	Ceramill Stain grey 4g	
760355	Ceramill Stain white 4g	
760356	Ceramill Stain A 4g	
760357	Ceramill Stain B 4g	
760358	Ceramill Stain C 4g	
760359	Ceramill Stain D 4g	
760360	Ceramill Glaze, glaze powder 4g	
760361	Ceramill Stain & Glaze Working Liquid Liquid for mixing the stain and glaze powders 25 ml	
760362	Ceramill Stain & Glaze Reflow Liquid Liquid for restoring the initial consistency	





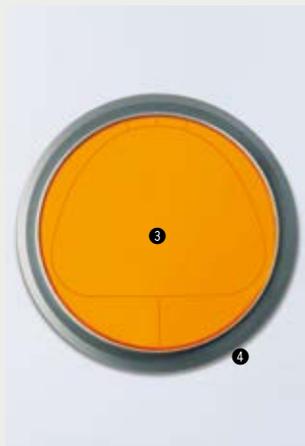
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4



6

Holding Plates

Plastic plates for the fast clamping of plastic models ensure secure positioning in the milling unit.

For use with Ceramill Base and Ceramill Multi-x:

760910	1 Holding Plates Preforms pack of 50	★
760919	2 Holding Plates 31/51 - holding plates for synthetic modelling (for use with Ceramill ZI 31/51) pack of 50	★
760941	3 Holding Plates 71/77 - holding plates for synthetic modelling (for use with Ceramill Base und Multi-x, suitable for Ceramill ZI 71/77) pack of 5	★

Frames for holding plate for use with Ceramill Base

760942	4 Frame (multiple use) with integrated positioning guide for holding plate, pack of 1
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Frames for holding plate for use with Multi-x

760943	4 Frame (multiple use) with integrated positioning guide for holding plate 71/77 pack of 1
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Positioning aids:

760971	5 Positioning aid 31/51 (incl. in delivery volume of 178500)	
760972	6 Positioning aid Preforms	★



Ceramill Sep - Thinner and more reliable coating, lemon-scented

Ceramill Sep

Isolates the modelling resins Ceramill Gel/Pontic from gypsum and stump varnish (especially Giroform Die Link).

760561	Ceramill Sep	★
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Ceramill Marker - Excellent adhesion during processing with a water-cooled laboratory turbine. Marks imperfections without depositing anything.

Ceramill Marker

Blue, oil-based contact paste for fitting zirconium oxide crowns (e.g. Ceramill ZI).

760021	Ceramill Marker	★
583150	Paste brush	



Other colour solutions x 100 ml:

760476	Ceramill Liquid CL OR
760477	Ceramill Liquid CL GR
Accessories:	
760450	Ceramill Liquid colour jar (10 pcs.)
760478	Ceramill Liquid Brush, Size 1 (10 pcs.)
760450	Ceramill Liquid Brush, Size 3 (10 pcs.)

Ceramill Liquid

Four dilutable, water-based, colour solutions for reliable handling and customised staining of Ceramill ZI and Ceramill ZOLID restorations before sintering.

760470	Ceramill Liquid complete set	★ 1x
4 colour solutions à 100 ml + jars + forceps + Ceramill Liquid Brush (Size 1+3, 1x each size)		

Colour solutions complete set:

760471	Ceramill Liquid CL1	760473	Ceramill Liquid CL3
760472	Ceramill Liquid CL2	760474	Ceramill Liquid CL4



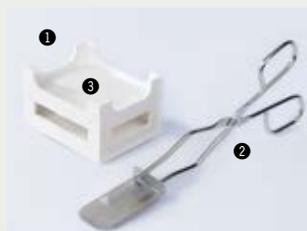
Ceramill Liquid Eye

Code colours for Ceramill Liquid

760480	Ceramill Liquid Eye complete set, 4 x 25 ml	□ 1x
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Code colours complete set:

760481	Ceramill Liquid Eye red	760483	Ceramill Liquid Eye blue
760482	Ceramill Liquid Eye green	760484	Ceramill Liquid Eye yellow



Technical Data
 Dimensions: 654 x 382 x 525 mm
 Weight: 35 kg
 Furnace chamber volume: 1,1l
 Max. power consumption: 2 kW
 Max. temperature: 1530°C

Ceramill Therm

178350 Ceramill Therm

Delivery volume: Ceramill Therm sintering furnace; Sintering shell, Sintering pearls, 200g, Ø 1mm

Accessories:

- 178360 ❶ Stackable sintering bowl, 1 pcs.
- 178370 Ceramill ZOLID Stackable sintering bowl, 1 pcs. □ 1x
 178360 and 178370: stackable only in Ceramill Therm (178350)
- 178361 ❷ Gripper for Sintering shell, stackable
- 178311 ❸ Sintering pearls 200g, Ø 1mm
 for Ceramill ZI and Ceramill ZOLID □ 1x



Technical Data:
 Dimensions:
 300 x 320 x 450 mm
 Weight: 8,8kg

Ceramill Aqua

177500 Ceramill Aqua

Delivery volume: Basic unit with model table MT3; trap dish

Accessories:

- 177520 Worklight
- 177511 Adapter NSK Presto Aqua
- 132300 NSK Presto Aqua II



Technical Data:
 Polymerisation LED 600 mW,
 450-470 nm
 Dimensions: 145 x 300 x 30 mm
 + swan neck (app. 800 mm)
 Weight: 2,6 kg

Ceramill UV

Polymerisation lamp with motion sensor for rapid, reliable hardening of modelling synthetics

- _ Proximity on/off switch for convenient use and freedom from glare
- _ Wavelength carefully matched to synthetic material for reliable polymerisation
- _ Audible signal at end of controlled polymerising time means that polymerisation can be accurately reproduced

178200 Ceramill UV



Ceramill Gel/Pontic

Light-hardening modelling synthetics for crowns and intermediate bridge elements.

- 760514 ❶ Ceramill Gel - light-hardening synthetic modelling material for crowns, green. Pack of 4 x 3g ★ 4x
- 760522 ❷ Ceramill Pontic - light-hardening synthetic modelling material for intermediate bridge elements, blue. Pack of 2 x 3g ★ 2x





Ceramil Polish - Lab Kit

Zircon oxide-polishing set for the dental technician

875500	Ceramil Polish - Lab Kit	Delivery includes: as shown in the photograph
875501	① PRE-Wheel medium (without mandrel) wheel, grain: medium, before sintering	10 pcs.
875502	② PRE-Cone medium cone, grain: medium, before sintering	10 pcs.
875503	③ PRE-Wheel fine (without mandrel) wheel, grain: fine, before sintering	10 pcs.
875504	④ PRE-Cone fine cone, grain: fine, before sintering	10 pcs.
875505	⑤ POST-Disc medium disc, grain: medium, after sintering	2 pcs.
875506	⑥ POST-Wheel medium wheel, grain: medium, after sintering	4 pcs.
875507	⑦ POST-Disc fine disc, grain: fine, after sintering	2 pcs.
875508	⑧ POST-Wheel fine wheel, grain: fine, after sintering	4 pcs.



Ceramil Polish - Dent Kit

Zircon oxide-polishing set for the dentist

875509	Ceramil Polish - Dent Kit	Delivery includes: as shown in the photograph
875510	① Cup medium, cup, grain: medium	4 pcs.
875511	② Disc medium, disc, grain: medium	4 pcs.
875512	③ Cup fine, cup, grain: fine	4 pcs.
875513	④ Disc fine, disc, grain: fine	4 pcs.



Giroinvest Speed

724070	Giroinvest Speed Powder 5 x 4 kg bag = 20 kg
724072	Giroinvest Speed Powder 100 x 200 g bag = 20kg
724081	Giroinvest Liquid 1 l



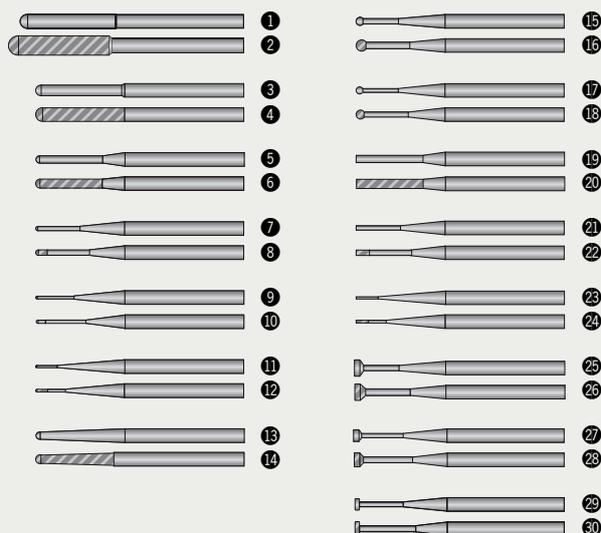
Giroinvest Super

781670	Giroinvest Super Powder 40 x 150g-bag = 6kg
781680	Giroinvest Super Powder 50 x 100g-bag = 5kg
781685	Giroinvest Super, 2 x 4 kg
724090	Giroinvest Super Liquid 1 l
781679	Measuring cup 100ml
521410	Expander Casting Ring Liner 50 mm x 1mm



Technical and physical data
 Mixing ratio: 100 : 25
 Mixing time: 105 s
 Working time: 5 min
 Initial setting: 9-11min
 Setting time: 25 min
 Compression strenght after 2h: 4-8MPa
 „Speed“ temperature: 850°C
 Preheat temperature: max. 1050°C
 Overall expansion: max. 4 Vol.-%

ORDER INFORMATIONS



Ceramill Roto

760801	① T 4mm		760791	⑮ KF 2,5mm
760701	② F 4mm		760892	⑰ KT 1,8mm
760831	③ T 3mm	★	760792	⑱ KF 1,8mm
760731	④ F 3mm	★2x	760861	⑲ ST 2mm
760821	⑤ T 2mm	★	760761	⑳ SF 2mm
760721	⑥ F 2mm	★2x	760871	㉑ ST 1,2mm
760811	⑦ T 1,2mm	★	760771	㉒ SF 1,2mm
760711	⑧ F 1,2mm	★	760881	㉓ ST 0,6mm
760809	⑨ T 0,9mm		760781	㉔ SF 0,6mm
760709	⑩ F 0,9mm		760830	㉕ UT 3mm
760851	⑪ T 0,6mm		760730	㉖ UF 3mm
760751	⑫ F 0,6mm		760820	㉗ UT 2mm
760840	⑬ CT 2mm		760720	㉘ UF 2mm
760740	⑭ CF 2mm		760819	㉙ TT 2mm
760891	⑯ KT 2,5mm		760719	㉚ TF 2mm



Girobond® NBS

Packaging:

781610	Girobond NBS	1.000g
781611	Girobond NBS	50g



Girobond® CBS

781690	Girobond CBS	1.000g
781691	Girobond CBS	50g



Girosolder

781630	Girosolder, 3,6g
781560	Soldering Paste 18g tin



Girocrom® FH

721250	Girocrom FH, 1.000g - Laboratory pack
721251	Girocrom FH, 50g - Trial





Girotan® L

Titanium alloy (Ti6Al7Nb) is a chemically inert material that has been used as implant material for medical indications in men since more than 20 years already. Same degree of biocompatibility, same low heat conductivity, and as light-weight as pure titanium. However, Girotan L exceeds the strength of pure titanium by factor 3.

- _ Easy to work, polishable like gold
- _ Suitable for any indication since light-weight and highly stable
- _ Radiopaque, chemically neutral, low heat conductivity
- _ Minimum material costs, maximum benefit for the trade

Girotan L (Ti6Al7Nb-alloy):

764321	Ø 26 x 8,4 mm, 50 x 20g-Ingots
764331	Ø 26 x 12,6 mm, 34 x 30g-Ingots
764341	Ø 29 x 13,5 mm, 25 x 40g-Ingots
721141	Girotan-Laser welding wire 0,35 x 2 m
721120	Titanium welding wire 0,5 x 2 m
721121	Titanium welding wire 0,25 x 2 m



Light weight, high stability, low heat conductivity, good laser welding behavior. These excellent features distinguish Girotan L.



The bond strength between Girotan L / Digitan and the facing porcelain corresponds, according to the Schwickerath test, to the values of precious metals, no matter if cast or milled. Creation-like esthetics.



SEM picture (magnification 650:1) showing a marginal area without alpha-case layer (University Dental Clinic Tuebingen / Germany, Prof. Juergen Geis-Gerstorfer / Prof. Wolfgang Lindemann)

Technical and physical data:

Pure titanium and titanium alloy may only be melted with the electric arc method under high vacuum and with argon gas protection (Ticast / Symbiocast).

	Girotan L
Melting range	1.650°C
Tensile strength Rm [MPa]	850
Proofstress Rp 0,2 % [MPa]	750
Modulus of elasticity E [GPa]	110
Elongation at rupture A [%]	> 8
Vickers hardness HV 10	325
Density [g/cm ³]	4,52
WAK [25-500°C]	10,1 x 10 ⁻⁶ K ⁻¹
Alloy color	silver
Oxid color	grey



Giroinvest T

Magnesium zirconium investments for titanium casting. The special MgO-ZrO₂ combination prevents reactions between the molten metal and the investment as well as the formation of an alpha-case layer and reliably controls the expansion, thus ensuring excellent fitting precision.

- _ Well-coordinated expansion control for crown and bridge work / CoCr cases
- _ Homogeneous mixture with distilled water
- _ Perfect fit without further processing
- _ Easy polishing, high surface density due to cold casting

764050	Giroinvest TC Powder 25 x 200g bag = 5,0kg
764060	Giroinvest TM Powder 20 x 180g bag = 3,6kg
764070	Giroinvest TD Powder 10 x 700g bag = 7,0kg



Noflame® Plus

116250 Noflame Plus

Delivery volume: basic unit with power cable, 2 protective covers

116210 Protective caps/10 pcs.

Technical Data

Dimension: 195 x 85 x 83
 Weight: 600g
 Mains supply: 230V/50Hz/130W



Smartwax Duo

116270 Smartwax Duo, basic unit

Delivery volume: control unit with mains adaptor, handpiece with cord (116280), probe small incl. handle (116281), cotton role holder

116280 Handpiece with cord

Technical Data

Dimension: 130 x 150 x 50
 Cable length of handpiece: 1,8 m
 Electrical specifications of mains adaptor: 110 - 230V 50/60 Hz
 Output: 6 V, Power: 12 W
 Temperature range: 50 - 220°C / 122 - 428°F - switchable



Accessories:

116281 ① Probe small incl. handle

116282 ② Probe large incl. handle

116283 ③ Needle incl. handle

116284 ④ Beaver tail incl. handle

116285 ⑤ Knife incl. handle

116286 ⑥ Spoon incl. handle

116229 Dental rolls, 100 pcs.



Waxjet (pat. pend. ZTM Jonas)

Intelligent solution for application of wax. The continuous wax supply via the unique feeding mechanism of the Waxjet allows the dental technician to quickly apply a big amount of wax. The fluidized wax gets through the concave probe to the tip and the quantity of the wax can be determined individually by the technician - depending on, how quickly the wax wire is put forward with the help of the driving pulley.

_No annoying wax taking up

_For quick superficial fusing and application of wax

116287 Waxjet incl. handle

116289 Waxjet + handpiece with cord

641060 Waxjet wire pink / 6,0 / 280g



The Waxjet in action - e.g. during filling of the gingivobuccal fold. Rapidly ready for use - one touch is enough.





Milling Device AF350

177605 Milling Device AF350

Delivery volume: basic unit with vertical lift, milling arm with W&H motor spindle, model table MT3, twin LED lamp, cover

Optional accessory

177998 Blockout-Upgrade-Kit AF350, adjustable, 3 parts
(for current version - see image)

Delivery volume: Blockout-Set 177990, Marking stick 17800, Adapter sleeve AF350 adjustable 177994

177995 Blockout Upgrade-Kit AF350, 4 parts
(for previous version)

Delivery volume: Blockout-Set 177990, Adapter cord for Marker 177993, Marker 177800, Adapter cord for Marker AF350 177806

177800 Marker

177661 W&H Collet 3 mm

Technical Data

Dimension: 340 x 250 x 450

Weight: 15 kg

Mains supply: 100/115/230 V, 50/60 Hz

Motor speed: 1.000-40.000 min⁻¹

Torque: max. 7,5 Ncm



Blockout Parallelometer AP100

177700 AP100 (without model table)

Delivery volume: basic unit with jointed arm P (177131) and marker (177800)

Optional accessory:

177360 Model table MT2

177350 Model table MT3

216291 Model table MT3 „Splitex“

177960 Blockout-Set (P. 4 | 3)

177991 Adapter cord AP100/Diacut (for Blockout)

177450 Halogen Lamp

177071 Milling Head

Technical Data

Dimension: 210 x 180 x 400

Weight: 6,2 kg

Range of collet: 1-3 mm

Mains supply: 115 V/230 V - 50 Hz

Power: 22 W



Blockout

Heatable blockout blades 0° to 6°, with parallelly guided plug-in contact for handpiece connection. To be inserted into the chuck of the marker (Ø 3mm). Connection to any controllable voltage source providing 24V (e.g. 171161).

177990 Blockout and 5 inserts 0°-6°

Optional accessory

- 177991 Adapter cord AP100/Diacut/Blockout
- 177993 Adapter cord AF350/APF450
- 177806 Adapter cord for surveyor AF350
- 177994 Adapter cord AF350 adjustable
- 177980 Blockout insert 0° Ø 1,3 mm
- 177981 Blockout insert 0° Ø 2mm
- 177982 Blockout insert 2° conic
- 177983 Blockout insert 4° conic
- 177984 Blockout insert 6° conic

177960 Blockout-set AP100 including adapter cord AP100



Starterkit for Milling Technique

Comprises, besides oil and training material, all tools required for surveying, scraping, setting, transferring and milling tasks (all items may be ordered separately as well).

873001 Starterkit for Milling Technique, 12 parts (as pictured)

consisting of:

- 177653 Training cylinder (Typ 1), MS-Milling-Training cylinder
- 177654 Milling example Typ 2, MS-Drill-Training cylinder
- 177655 Training cylinder holder MT2/3 for FM Typ 1+2
- 177810 Transfer Support Piston-Ø 2,35mm
- 177820 Transfer Support Piston-Ø 3,0mm
- 177870 Mine red 12-part, incl. carbon marker holder
- 177880 Mine blue 12-part, carbon marker holder
- 177656 Milling oil 5 x 50 ml
- 177830 Undercut gauge 0,25mm, Piston-Ø 3mm
- 177840 Undercut gauge 0,50mm, Piston-Ø 3mm
- 177850 Undercut gauge 0,75mm, Piston-Ø 3mm
- 171930 Plaster plate

also:

873002 Milling set 12-part



Model Table MT2/MT3/Splitex

MT2: inclinable table, from 0° to 90°, both final positions are under forced guidance, fixed with manual clamp lever. Plinth plate may be magnetized.

MT3: inclination 0° to 41°, manual/electromagnetic fixation by degrees, 0/2/4/6° also mechanical (sleeve/ring); electromagnetic positioning.

Splitex: like MT3, however, with Splitex magnetic plate to accept the model.

- 177360 ① MT2 Model Platform / 0° - 90°
- 177350 ② MT3 Model table / 0° - 14°
- 216291 ③ MT3 Model table / Splitex



TRAINING COURSES

KNOW-HOW



Know the technique - master the manual skills

State-of-the-art technologies, growing expectations of patients and not least global competition step up the pace in our business sector as well. For those who want to meet the demands of the market in the long run, it is vital to be flexible and stay at the cutting edge of technology.

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Our contact persons are available if you have any questions or would like to register. They ensure a smooth procedure and that you can fully concentrate on your training at our locations in Germany and Austria or in the "AG training center Middle East" in Beirut (Lebanon).



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Intern. course organization



Silja Vielsack
Intern. course organization



Université Antonine

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For information on courses held by our dealers worldwide please contact them directly.

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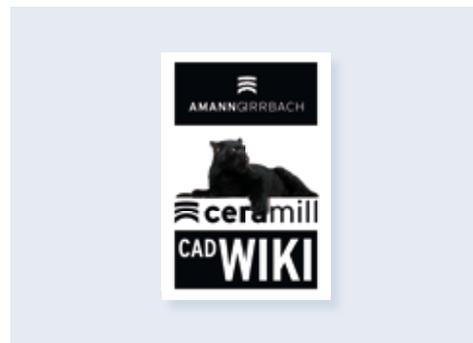
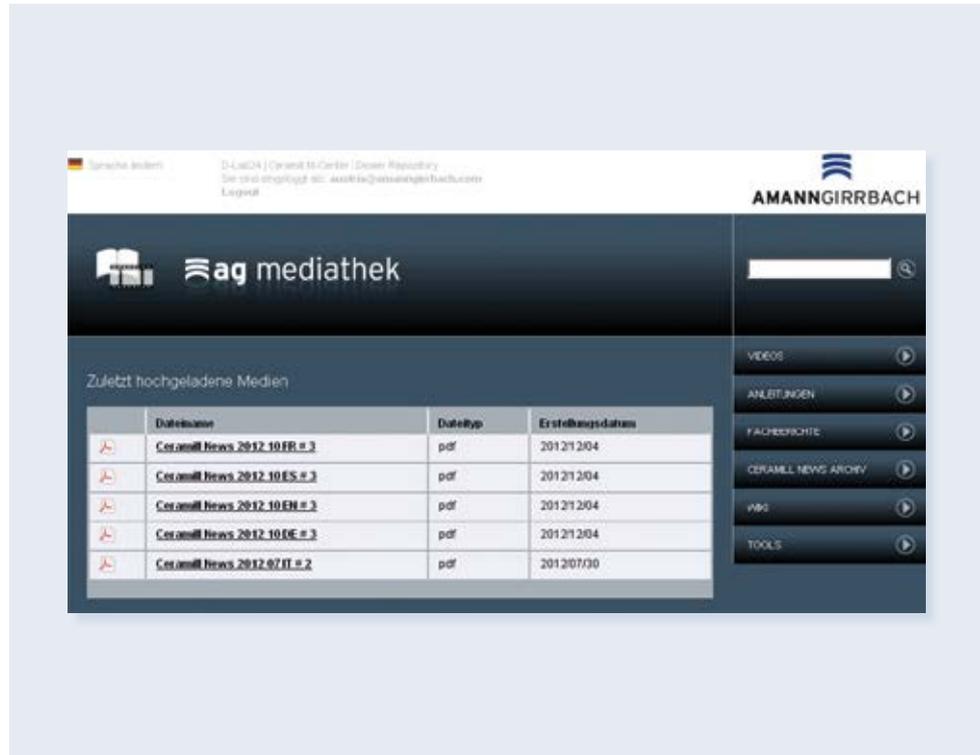
abdo.salem@amangirrbach.com



The virtual font of knowledge from Amann Girrbach.

The AG Media Library is a digital archive with a concentrated store of dental knowledge from the contents of the old Ceramill M-Center website, D-Lab24 and the download area of the AG homepage.

All the valuable knowledge of the dental branch collected over the years can be easily and concisely retrieved from the library - whether print or video instructions on software, hardware, specialist reports, studies, Wikis, user cases etc.



...the Ceramill CAD Wiki and much more



...specialist reports, studies...



The AG Media Library is available around the clock with videos and application tutorials...



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Amann Girrbach Products can only be acquired outside of Germany and Austria from our authorised dealers

You can find a specialist dealer in your area through our world-wide network of Amann Girrbach dealers.

If you do not have an active Internet access or if you cannot find a dealer in your area, please contact our export department at the Amann Girrbach headquarters in Koblach, Austria:

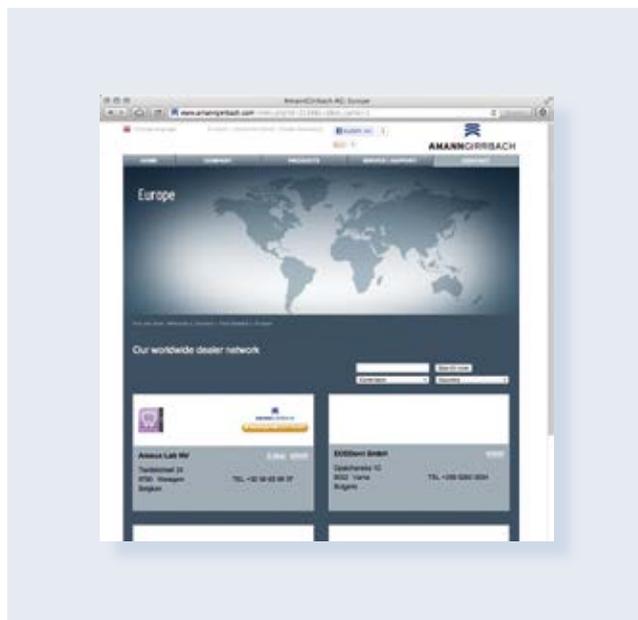
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Dealer directory:

www.amanngirrbach.com/en/contact/find-dealers/

Amann Girrbach Headquarter:

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Authorised Amann Girrbach service partners in your area

The authorised service companies from Amann Girrbach provide a repair service using original Amann Girrbach machines and spare parts. These service companies have trained personnel and the technical information necessary for the correct and professional repair of our machines.

If you cannot find your service company, please contact our in-house technical service department:

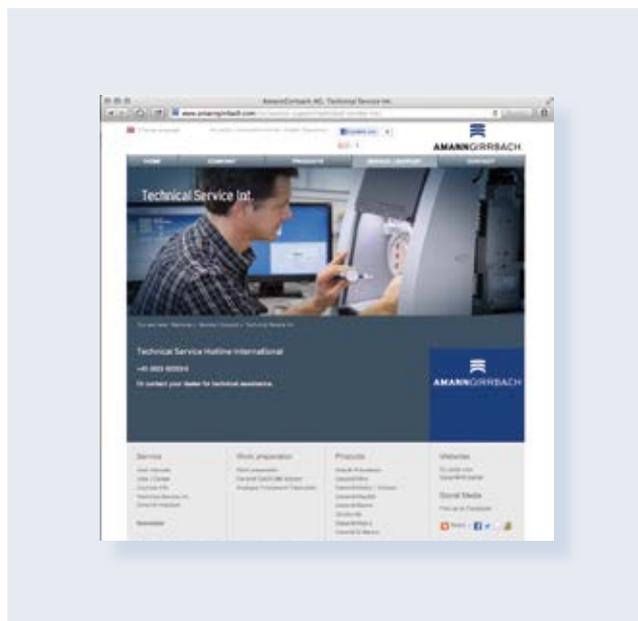
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or

www.amanngirrbach.com/en/contact/technical-service-int/



Experience the practical use of equipment, materials and systems, at a location near you



Information days are being held in certified laboratories worldwide. They are among the leading dental laboratories in their region in terms of size, quality, equipment and innovative capability.

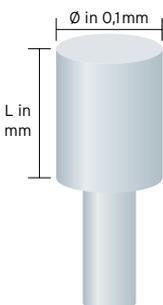
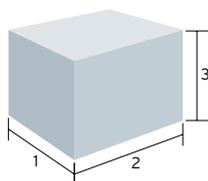
Exchange of experiences between colleagues - this describes the service provided by the new Amann Girrbach Live Labs.

Registrations and current dates are available from your dealer or you can find a current list of all AG Live Labs at www.amanngirrbach.com

GENERAL INFORMATION

In this catalogue, the product information is restricted to some elementary features and applications.

You will find more information in the according system brochures and/or leaflets.



Technical data

In general, all dimensions are indicated in millimeters (mm) lined up in depth/length x width x height:

- 1. depth
- 2. width
- 3. height

If this is not the case, the differing indications are clearly defined (e.g. diameter = Ø, drilling, thickness, etc.)

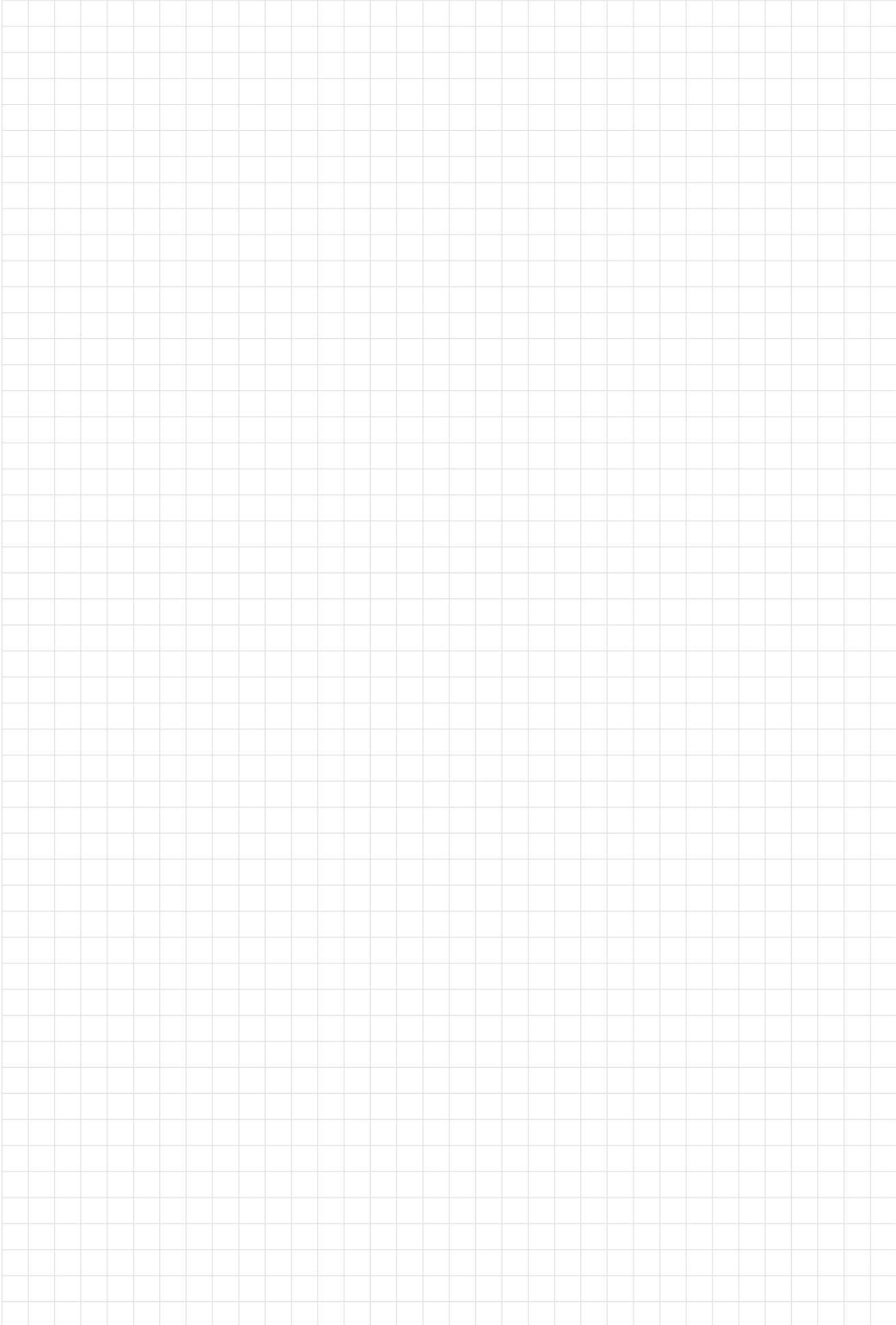
Delivery volume

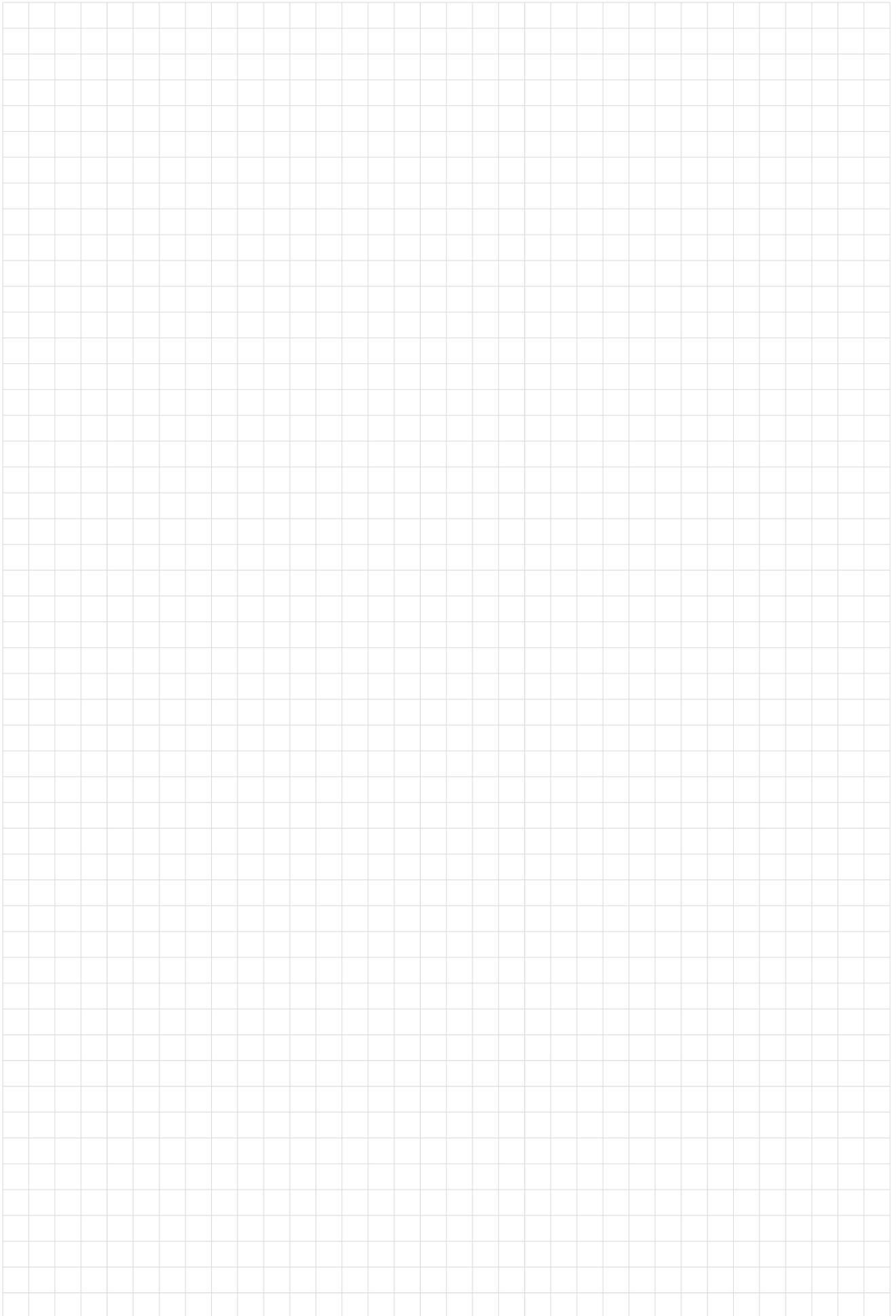
Introductory kits of systems or basic equipment for units are presented, on one hand, as complete set and, on the other hand, as single articles with different article numbers for repeat orders.

Replacement parts

... will be mentioned only in cases where there is high customer demand. All replacement parts are listed with article number in the unit's manual.

Changes, in the sense of better function, performance, service life and technical improvements are subject to alterations.







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