

The background of the entire page is a grayscale photograph of a dental milling machine. In the center, four cylindrical metal tool bits are standing upright in a holder. One of the bits has the 'Zirkonzahn' logo printed vertically on it. To the right, a larger, more complex tool head is visible, partially out of focus. The overall scene is industrial and precise.

Zirkonzahn®

Human Zirconium Technology

100% READY TO FACE THE FUTURE

Open and upgradeable CAD/CAM systems

ENDLESS POSSIBILITIES



The main goal of our work is to provide quality, perfection, precision and clever solutions at the right price.

During the development of our CAD/CAM systems, we realized that this is a never-ending process.

Driven by great curiosity, the need to seek new challenges and through the acquisition of new knowledge, we developed a modular system that offers a wide variety of solutions.

Our CAD/CAM System 5-TEC can be upgraded at any time, offering our clients the assurance of always having a reliable and state-of-the-art machine at their disposal. With the newly developed milling machines M4 and M6 we consistently continue this direction.

After the initial CAD/CAM euphoria the requirements for the acquisition of a CAD/CAM system are now much clearer and more differentiated. The new Compact Line Milling Unit M1, with its various versions, takes account of these differentiated and clear requirements.

Enrico Stejer

CAD/CAM SYSTEMS - OPEN IN ALL DIRECTIONS



Milling Unit M1 Abutment



Milling Unit M1 Soft



Milling Unit M1 Wet



Milling Unit M1 Wet Heavy Metal



Milling Unit M4



Milling Unit M5 Heavy



Milling Unit M6

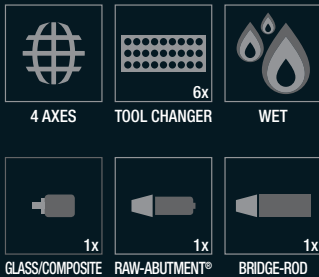


Scanner S600 ARTI

OPEN AND UPGRADEABLE MILLING UNITS



MILLING UNIT
M1 ABUTMENT



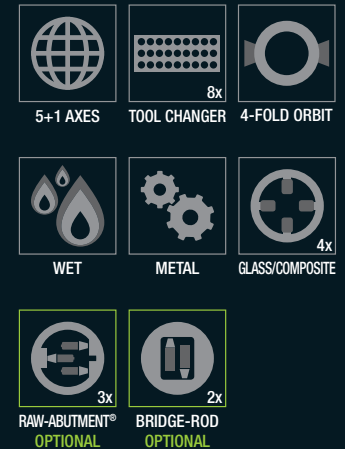
MILLING UNIT
M1 SOFT



MILLING UNIT
M1 WET



MILLING UNIT
M1 WET HEAVY METAL



COMPLETE
CAD/CAM SYSTEM



+



+

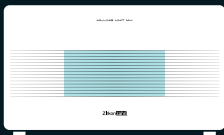


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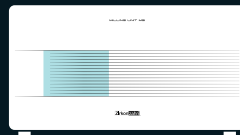


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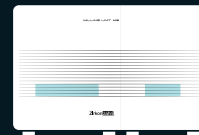




MILLING UNIT
M4



MILLING UNIT
M5 HEAVY



MILLING UNIT
M6



SCANNER
S600 ARTI



5+1 AXES



MODULAR



DBL ALIGNMENT



TOOL CHANGER



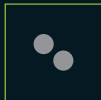
WET



METAL



4-BLANK-PLATE



2-BLANK-PLATE
OPTIONAL



GLASS/COMPOSITE
OPTIONAL



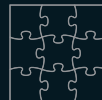
RAW-ABUTMENT®
OPTIONAL



BRIDGE-ROD
OPTIONAL



5+1 AXES



MODULAR



MULTITASKING



DBL ALIGNMENT



TOOL CHANGER



SPEED



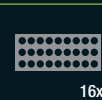
METAL



WET
OPTIONAL



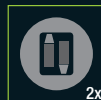
SPINDLE SOFT + TOOL CHANGER
OPTIONAL



GLASS/COMPOSITE
OPTIONAL



RAW-ABUTMENT®
OPTIONAL



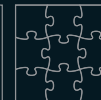
BRIDGE-ROD
OPTIONAL



LASER
OPTIONAL



5+1 AXES



MODULAR



TOOL CHANGER



WET



METAL



BLANK CHANGER



GLASS/COMPOSITE
OPTIONAL



RAW-ABUTMENT®
OPTIONAL



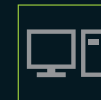
BRIDGE-ROD
OPTIONAL



TOOL CHANGER
OPTIONAL



BLANK CHANGER
OPTIONAL



PC+SCREEN
OPTIONAL

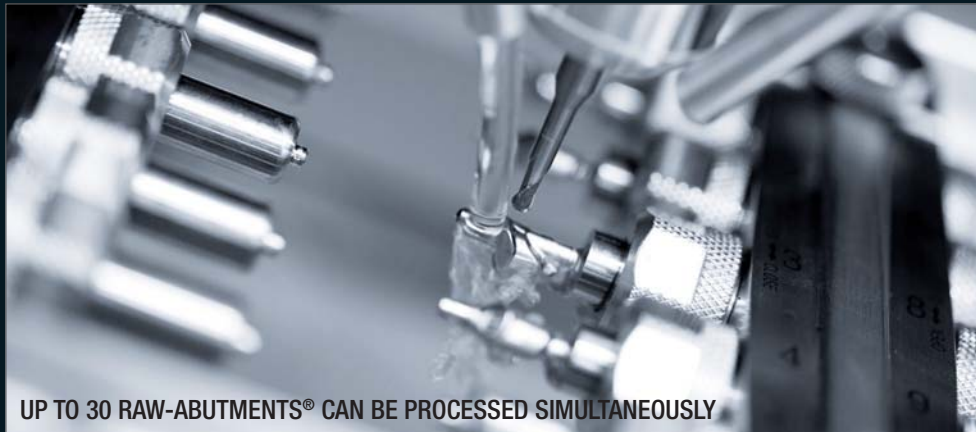


MODELLIER
OPTIONAL

BLANK CHANGER
TOOL CHANGER
2-BLANK-PLATE
4-BLANK-PLATE

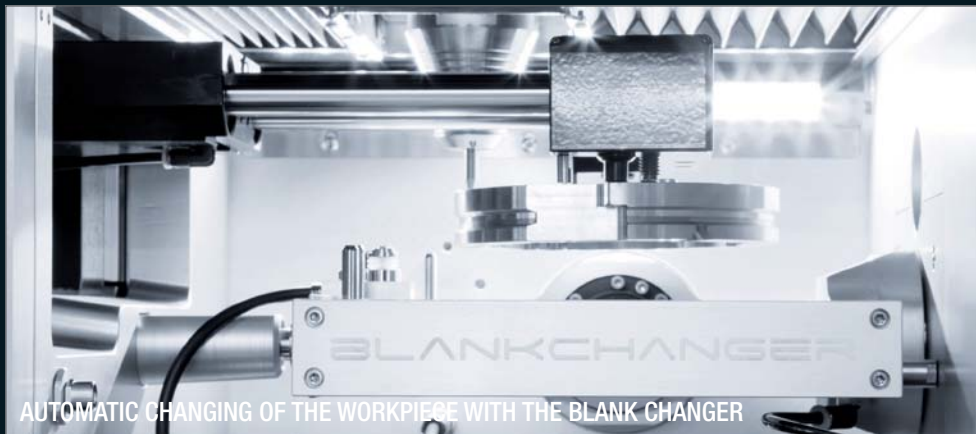
= BLANK CHANGING FUNCTION
= TOOL CHANGING FUNCTION
= WORKING PLATE WITH INSERTS FOR
TWO MATERIAL BLANKS
= WORKING PLATE WITH INSERTS FOR
FOUR MATERIAL BLANKS

COMING SOON! MILLING UNIT M4



- 5+1 axes simultaneous milling technology
- For processing of zirconia, resin, wax, wood, sinter metal, chrome-cobalt, titanium as well as precast titanium abutment blanks Raw-Abutments®, precast bridge blanks Bridge-Rods, glass ceramics and composite depending on equipment
- With an extra large milling area (38.5 x 15.9 cm) specifically suitable for mass production of models (up to 20 full arches)
- Tool Changer function and Tool Magazine enable changing of up to 32 milling tools
- Automatically extendable protective glass prevents that milling chips and other dirt particles impurify the tools stored in the Tool Magazine
- Different supports can be used: 2- and 4-Blank-Plate, Raw-Abutments®, Bridge-Rod Holder, Glass Ceramics Holder
- All materials needed for the manufacturing of a complete dental restoration (such as Raw-Abutments®, glass-ceramics, metal, resin) can be processed in just one milling process

COMING SOON! MILLING UNIT M6



- 5+1 axes simultaneous milling and orbit technology
- For processing of zirconia, resin, wax, wood, sinter metal, chrome-cobalt, titanium, glass ceramics, composite as well as precast titanium abutment blanks Raw-Abutments® and precast bridge blanks Bridge-Rods depending on equipment
- Blank Changer function and Blank Magazine enable changing of up to 14 workpieces
- Tool Changer function and Tool Magazine enable changing of up to 49 milling tools
- Individual extension options, e.g. Raw-Abutment® Holder, Bridge-Rod Holder

NEW! PRETTAU® ANTERIOR



- Extremely translucent zirconia for the elaboration of single crowns, inlays, onlays, veneers and at maximum 3-unit bridges (full contoured or reduced structures for ceramic layering)
- Flexural strength of 670 MPa (University of Pennsylvania)
- Particularly suited for the anterior tooth region
- Ideal alternative to lithium disilicate
- Also perfectly appropriate for posterior tooth restorations
- Higher translucency due to optimised microstructure of the zirconia
- No ceramic chipping and abrasion to the antagonist tooth

PRETTAU® ANTERIOR BLANKS

- Diameter: 95 mm, 98 mm, 98 mm with step
- Available in 6 different heights (from 10 to 22 mm)
- Can be processed with all milling units (except for M1 Abutment)

NEW! ANATOMIC COLOURED



ANATOMIC COLOURED – BEFORE AND AFTER SINTERING

- *Pre-coloured zirconia for the elaboration of single crowns, inlays, onlays, veneers and up to full-arch bridges (full contoured or reduced structures for ceramic layering)*
- *The colouring substances are added to the zirconia powder already during the first production steps*
- *Homogeneous colouring of the material*
- *Manual colouring working step becomes obsolete*
- *Differences in characterisation, caused by dissimilar working techniques of the dental technicians, can be avoided*
- *Available in the 16 shades of the VITA colour scale*



4-UNIT BRIDGE MADE FROM ANATOMIC COLOURED

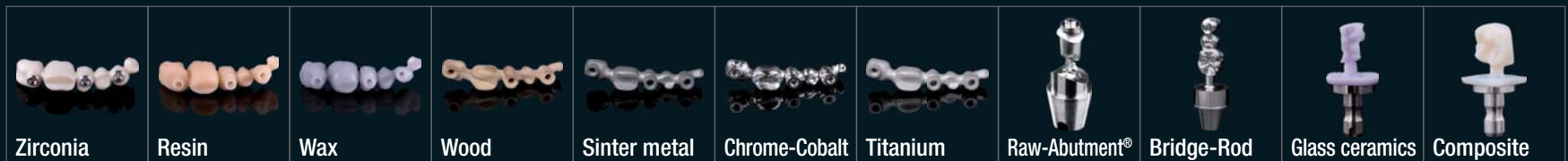
ANATOMIC COLOURED BLANKS

- *Diameter: 95 mm, 98 mm, 98 mm with step*
- *Available in 4 different heights (from 10 to 22 mm)*
- *Can be processed with all milling units (except for M1 Abutment)*

MILLING SPINDLE HARD AUTOMATIC

Milling spindle for processing of zirconia, resin, wax, wood, sinter metal, chrome-cobalt, titanium, precast titanium abutment blanks Raw-Abutments®, precast bridge blanks Bridge-Rods, glass ceramics and composite.

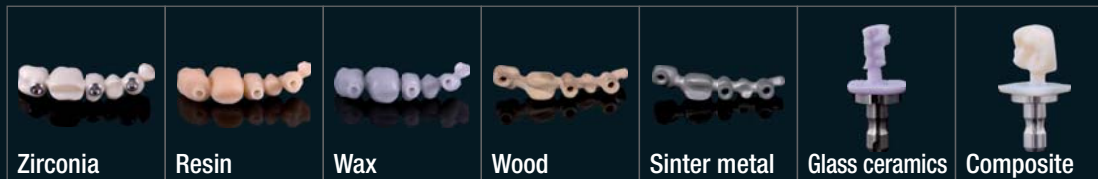
- *To be used with the Milling Units M1 Abutment, M1 Wet Heavy Metal, M4, M5, M5 Heavy and M6*
- *Suitable for wet processing*
- *Possibility of automatic tool changing*



MILLING SPINDLE SOFT AUTOMATIC

Milling spindle for processing of zirconia, resin, wax, wood, sinter metal, glass ceramics and composite.

- *To be used with the Milling Units M1 Soft, M1 Wet, M4 and as an additional second milling spindle with the Milling Units M5 and M5 Heavy*
- *Suitable for wet processing*
- *Possibility of automatic tool changing*



CHROME-COBALT



- *For manufacturing of metal frameworks*
- *Suitable for veneering with metal ceramics*
- *Health-friendly and corrosion-resistant*
- *Stable, homogeneous material structure*
- *Low tool wear*

CHROME-COBALT BLANKS

- *Diameter: 95 mm*
- *Available in 6 different heights (from 10 to 22 mm)*
- *Can be processed with the Milling Units M1 Wet Heavy Metal, M4, M5 Heavy, M6 as well as with the Milling Unit M5 depending on equipment*
- *Milling time per unit: between 30 and 60 minutes (depending on milling unit)*



TITANIUM



TITAN 5 BLANKS

- *For the manufacture of any kind of metal framework or restorations as well as of bar or implant constructions*
- *Extremely health-friendly and corrosion-resistant*
- *Increase of the laboratory's added value due to the possibility of in-house milling*

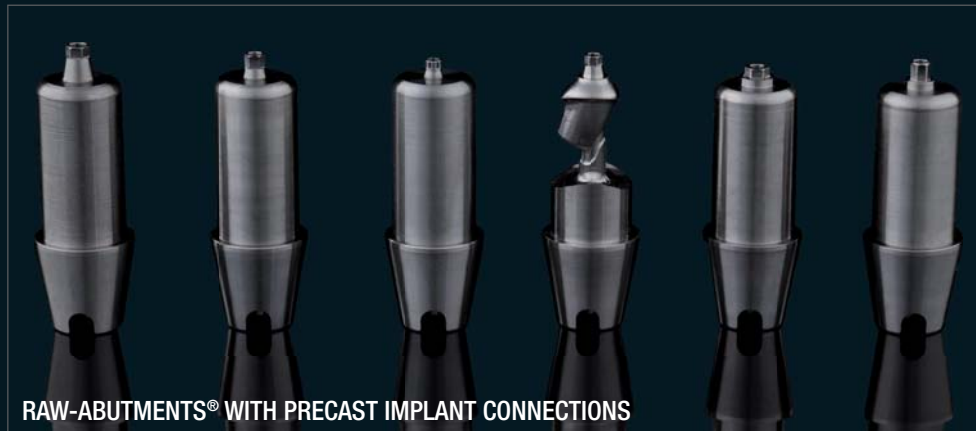
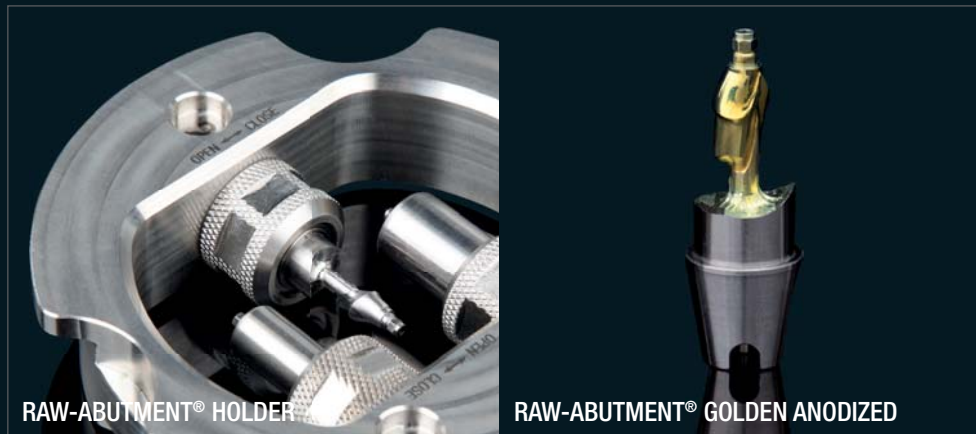
TITANIUM BLANKS ACCORDING TO ASTM-STANDARD

- *Diameter: 95 mm*
- *Available in 6 different heights (from 10 to 22 mm)*
- *Can be processed with the Milling Units M1 Wet Heavy Metal, M4, M6 as well as with the Milling Units M5 and M5 Heavy depending on equipment*
- *Milling time per unit: between 30 and 60 minutes (depending on milling unit)*



MILLING OF TITAN 5 IN YOUR OWN LABORATORY WITH THE MILLING UNIT M5 HEAVY

RAW-ABUTMENTS®



- *Precast abutment blanks for the manufacturing of individual abutments from highly biocompatible Titan 5 (ASTM standard)*
- *Can be processed with the Milling Unit M1 Abutment as well as with the Milling Units M1 Wet Heavy Metal, M4, M5, M5 Heavy and M6 in combination with Milling Spindle Hard Automatic, wet processing function Wet Grinding/Wet Milling and Raw-Abutment® Holder*
- *Fast manufacturing (20 minutes per abutment with the Milling Unit M1 Abutment, 25-30 minutes with the Milling Units M1 Wet Heavy Metal, M4, M5, M5 Heavy and M6)*
- *Perfect fit due to industrially precast implant connections*
- *Freely definable abutment geometries*
- *Can be anodized in different colours (e.g. gold-coloured) with the Titanium Spectral-Colouring Anodizer*
- *Availability depending on the implant system – the range is continuously being expanded*

BRIDGE-ROD TITAN 5 AND BRIDGE-ROD CHROM-COBALT



- For the manufacturing of at maximum 4-unit metal constructions from Titan 5 (wet processing) and Chrome-Cobalt (dry processing)
- Suitable for veneering with ceramics
- Can be processed with the Milling Unit M1 Abutment as well as with the Milling Units M1 Wet Heavy Metal, M4, M5, M5 Heavy and M6 in combination with Milling Spindle Hard Automatic, wet processing function Wet Grinding/Wet Milling and Bridge-Rod Holder
- Fast manufacturing (30 minutes per unit)
- Diameter: 15 mm; Height: 4 cm



SINTER METAL



SINTER METAL VENEERED WITH CERAMICS

- *Chrome-Cobalt alloy for metal frameworks for veneering with ceramics*
- *No smearing when processing*
- *Sintering without shielding gas with the sintering furnace Zirkonofen 700 Ultra-Vakuum (in combination with a special sintering adapter)*

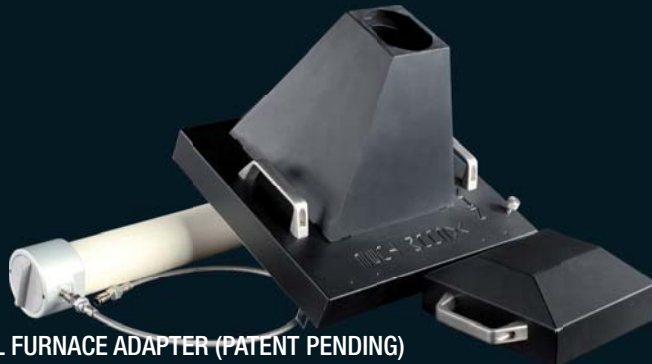
SINTERMETALL BLANKS

- *Diameter: 95 mm*
- *Available in 7 different heights (from 10 to 25 mm)*
- *Can be processed with the Milling Units M1 Soft, M1 Wet, M1 Wet Heavy Metal, M4, M5, M5 Heavy and M6*
- *Milling time per unit: between 30 and 60 minutes (depending on milling unit)*



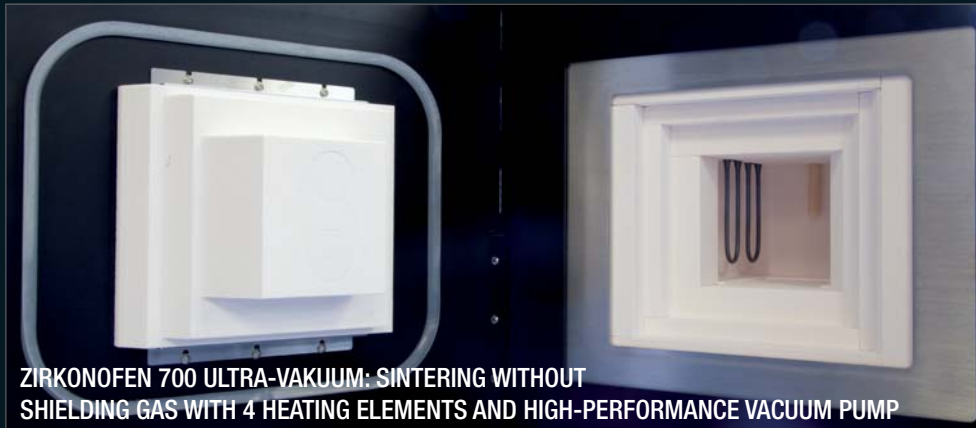
14-UNIT BRIDGE MADE FROM SINTERMETALL

ZIRKONOFEN 700 ULTRA-VAKUUM FOR ZIRCONIA AND SINTER METAL



SINTER METAL FURNACE ADAPTER (PATENT PENDING)
CAN BE RETROFITTED IN THE SINTERING FURNACE 700 ULTRA-VAKUUM

- *For sintering of zirconia*
- *In combination with the easy-to-install sinter adapter Sinter Metal Furnace Adapter also for sintering of sinter metal (especially economically, since no additional sintering furnace needed)*
- *Low maintenance, very robust*
- *Low consumption of the heating elements*
- *No contamination of the combustion chamber, because it is hermetically sealed*



ZIRKONOFEN 700 ULTRA-VAKUUM: SINTERING WITHOUT
SHIELDING GAS WITH 4 HEATING ELEMENTS AND HIGH-PERFORMANCE VACUUM PUMP

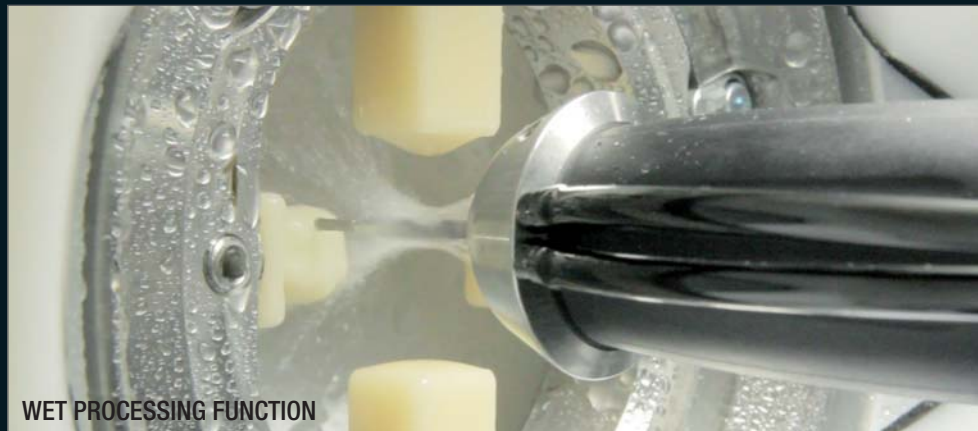




KIT WET GRINDING/WET MILLING: AVAILABLE ALREADY INTEGRATED OR AS UPGRADE KIT, EASILY SELF-UPGRADEABLE



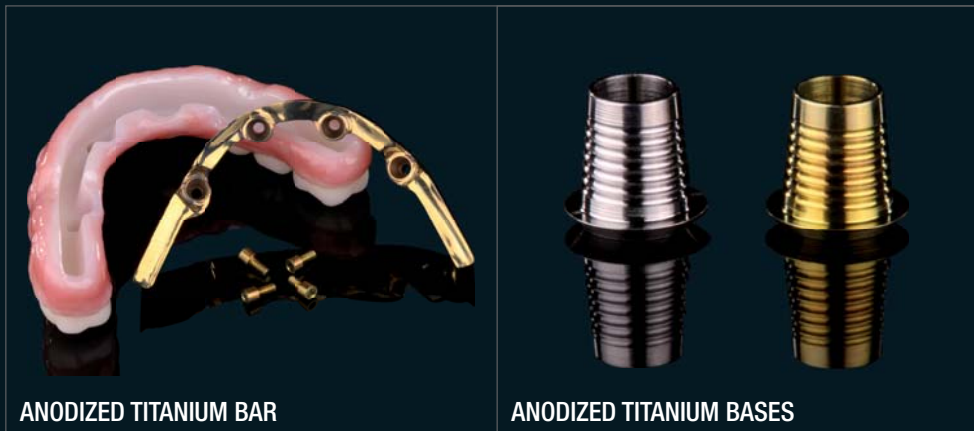
- In combination with Grindcontrol Basic or Grindcontrol for wet processing of all glass ceramics and composites
- In combination with Milling Spindle Hard Automatic for processing of titanium
- Available for the Milling Units M1 Abutment, M1 Wet, M1 Wet Heavy Metal, M4, M5, M5 Heavy and M6





Video
available online

TITANIUM SPECTRAL-COLOURING ANODIZER



- *For bio-compatible, coloured coating of titanium constructions (e.g. titanium bases and Raw-Abutments®) aiming at grey scale value reduction*
- *No shining through of the metal primary structures in zirconia restorations*
- *Multiple parts can be coloured within a few seconds*
- *Easy-to-clean, removable porcelain inserts*
- *Gold-plated cable connections*
- *Visual display of the processing status with multi-coloured LED illumination*
- *Even better bio-compatibility and osseointegration of titanium due to oxide layer*
- *Also suitable for colour codification of working materials, e.g. analog and implant screws*
- *Easy handling and maintenance*

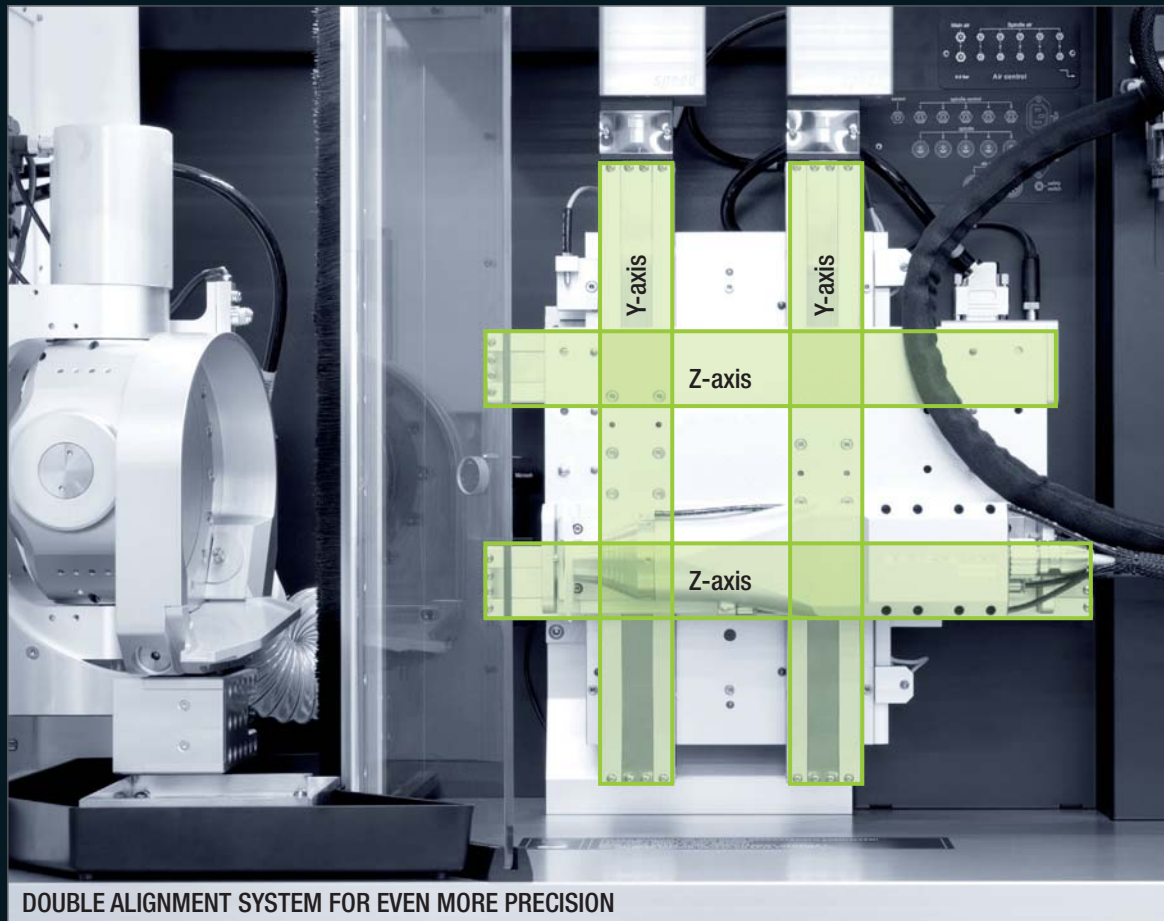
COMING SOON! MARKING LASER



- *Marking laser for individual inscribing of master casts*
- *Blue diode laser*
- *Wavelength: 490 nm*
- *Power: 3 watt*
- *High precision inscribing within a few seconds*
- *Available for the Milling Units M5 and M5 Heavy*



DOUBLE ALIGNMENT SYSTEM



- *Two Axes*
- *Double slide system*
- *No vibrations*
- *Stability*
- *Torsion resistance*
- *Without toothed belt*

DOUBLE ALIGNMENT SYSTEM FOR EVEN MORE PRECISION

INDEPENDENTLY INTO THE FUTURE WITH THE OPEN SYSTEM

OPEN THIRD-PARTY SCANNER

Scan files of an open third-party scanner can be processed with our modeling software and milled with our milling units without any problem.

OPEN THIRD-PARTY SCAN



ZIRKONZAHN.Modellier



OPEN MODELING SOFTWARE

With the Software-Module CAD/CAM Importation of STL-Files, open data of a different modeling software can be imported into our nesting software and then be milled with our milling units.

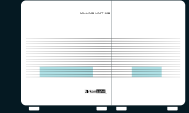
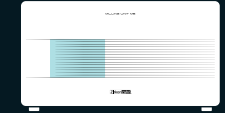
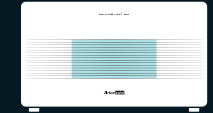
THIRD-PARTY SCAN +
OPEN MOCK-UP FILES



ZIRKONZAHN.Nesting

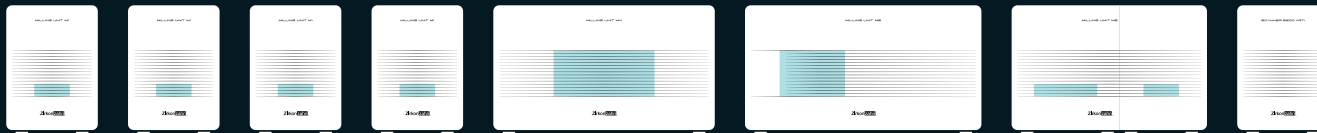


 SOFTWARE MODULE CAD/CAM
IMPORTATION OF STL-FILES



OPEN, FULLY AUTOMATIC SCANNER S600 ARTI

The open scan files of our Scanner S600 ARTI can be milled with all our milling units. Alternatively, the scan and modeling files can also be processed with open third-party milling systems or in a milling center.
















MILLING UNITS M1 ABUTMENT, M1 SOFT, M1 WET, M1 WET HEAVY METAL, M4, M5, M5 HEAVY AND M6












































MILLING CENTER

RANGE OF APPLICATIONS (WITH FULL EQUIPMENT)

	Copings	Full contour crowns	Full contour bridges	Inlays	Onlays	Eggshell temporaries	Bite splints	Models	Telescopic crowns	Glued-based abutments
M5, M5 HEAVY 5+1 axes simultaneous										
M6, M4, M1 WET HEAVY METAL 5+1 axes simultaneous										
M1 WET 5+1 axes simultaneous										
M1 SOFT 5+1 axes simultaneous										
M1 ABUTMENT 4 axes										

Can only be milled with 5+1 axes

Full contour zirconia abutments	Screw-retained bridges	Attachments	Bars	Bridges with undercuts and diverging abutments	Full dentures		Raw-Abutments®	Bridge-Rods	Metal structures	Glass ceramics	Composite	Laser
						+						
						+						
						+						
						+						
						+						

PROCESSABLE MATERIALS



Prettau® Anterior



Temp Basic



Temp Premium Transpa



Try-In I / Try-In II



Raw-Abutment®



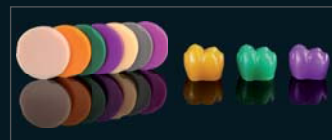
Prettau® Zirconia



Temp Basic Tissue



Temp Premium Flexible



Wax



Bridge-Rod Titan 5 and CrCo



Anatomic Coloured



Temp Basic X-Ray



Temp Premium Flexible Transpa



Sinter metal



Wood



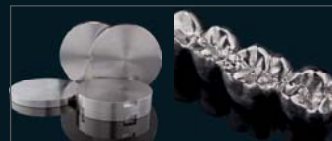
ICE Zirkon Translucent



Temp Basic Transpa



Tecno Med / Tecno Med Mineral



Chrome-Cobalt



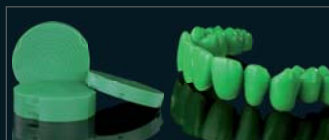
Glass ceramics



Zirconia Creative



Temp Premium



Burnout



Titanium



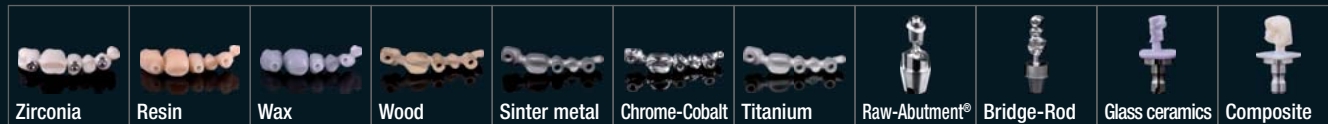
Composite

PROCESSABLE MATERIALS (WITH FULL EQUIPMENT)

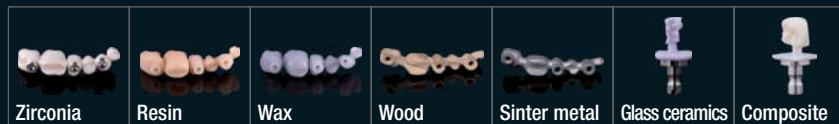
Milling Unit M5
Milling Unit M5 Heavy



Milling Unit M6
Milling Unit M4
Milling Unit M1 Wet Heavy Metal



Milling Unit M1 Wet



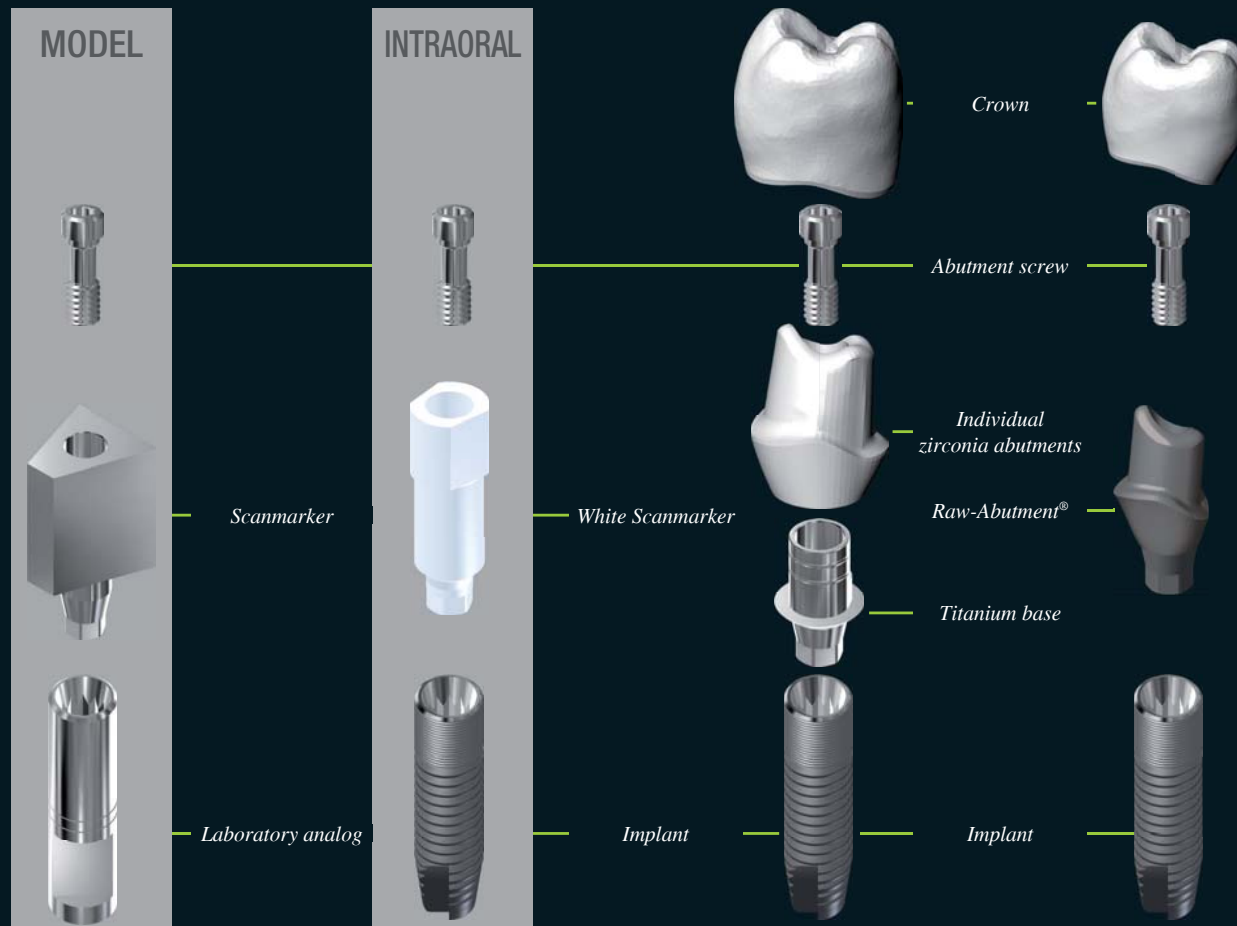
Milling Unit M1 Soft



Milling Unit M1 Abutment



INDIVIDUAL ZIRCONIA OR TITANIUM ABUTMENTS



IMPLEMENTATION OF THE MOST DIVERSE IMPLANT SYSTEMS

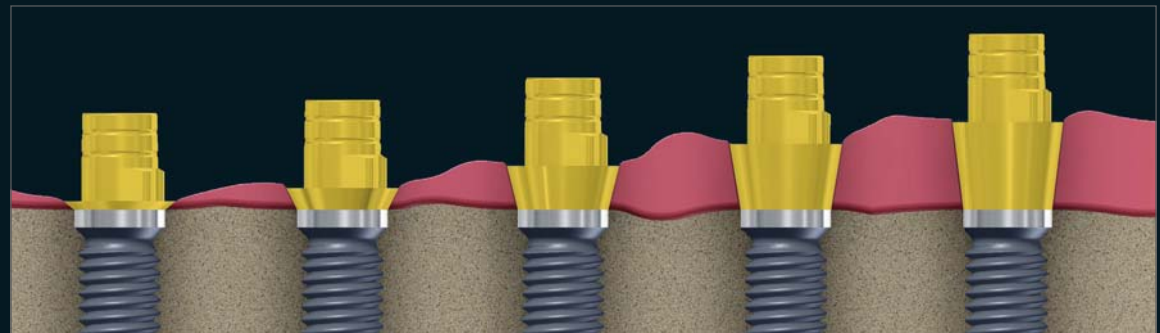
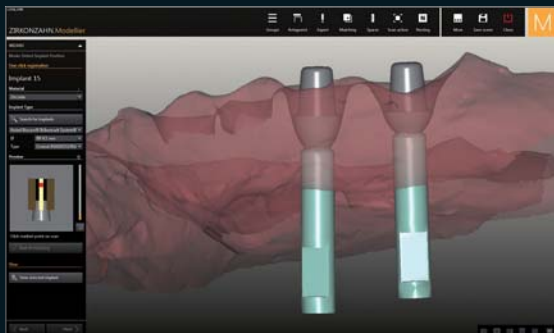
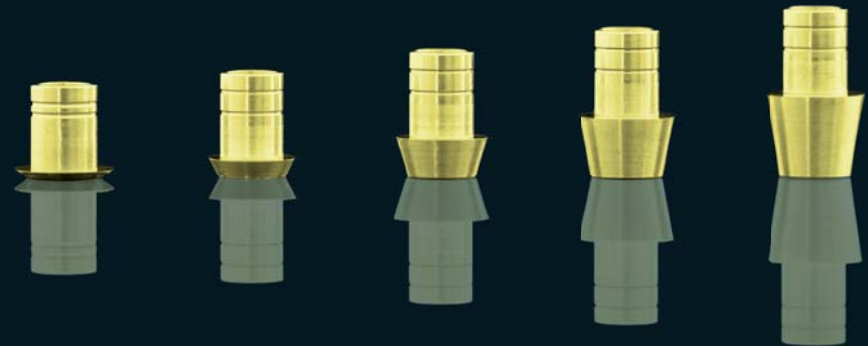
With the help of our scanmarkers it is possible to construct zirconia structures on both individual zirconia abutments on titanium bases or on individual Raw-Abutments® on implants.

Depending on the implant system there are required different titanium bases and Raw-Abutments®. Currently, over 500 implant systems are available on the market. We continuously implement the necessary components in our software.



TITANIUM BASES IN 5 HEIGHTS AND GOLD PLATED

- New platform heights available (from 1 to 4 mm) to bring the implant to the desired gingival level
- All titanium bases are also available gold plated – the gold coating increases the bio-compatibility and the golden shade reduces the grey value of the entire restoration
- The bio-compatible, coloured coating of titanium constructions is also possible with the Titanium Spectral-Colouring Anodizer



USE OF TITANIUM BASES

CONICAL CEMENTED TITANIUM BASES NON HEX

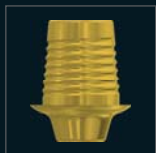
The Conical Cemented Titanium Bases NON HEX without anti-rotation device are ideal for the manufacturing of bridges consisting of various elements. The external, conical-shaped surface considerably facilitates the insertion of the restoration into the mouth. Spiral grooves located on the surface increase the contact area and ensure optimum adhesion of the cement.



For bridges



Without anti-rotation device for the zirconia abutment



Conical shape with spiral grooves

PARALLEL CEMENTED TITANIUM BASE HEX

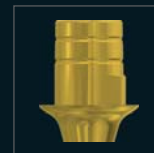
The Parallel Cemented Titanium Bases HEX are equipped with the required anti-rotation device depending on the implant system. This ensures that restorations can no longer be twisted once they are cemented. They are especially suitable for single crowns.



For single crowns



With anti-rotation device for the zirconia abutment



Parallel shape

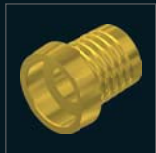


NARROW TITANIUM BASE NON HEX

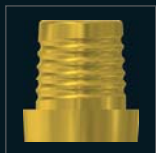
The Narrow Titanium Base NON HEX has no anti-rotation device. Since the diameter of the emergence profile is reduced to the minimum, this titanium base is especially suitable for thin, deep-seated implants.



For bridges



Without anti-rotation device for the zirconia abutment



Conical shape with spiral grooves

NARROW TITANIUM BASE HEX

The Narrow Titanium Base HEX has an anti-rotation device. Since the diameter of the emergence profile is reduced to the minimum, this titanium base is especially suitable for thin, deep-seated implants.



For single crowns



With anti-rotation device for the zirconia abutment



Parallel shape

NEW! LABORATORY ANALOGUES

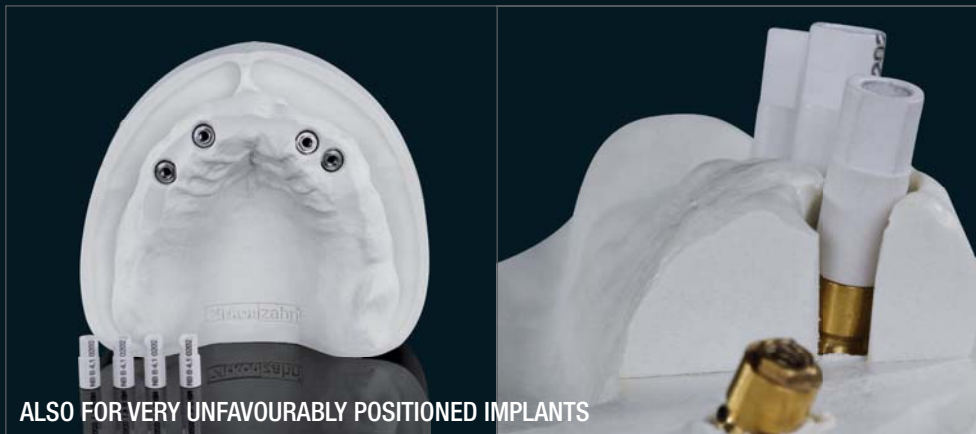


- The laboratory analogues replicate the precise connection to the implant which enables checking of the fitting accuracy of the Raw-Abutments® and titanium bases directly on the model
- Made from titanium Grade 5 (ASTM)
- To quickly distinguish the different diameters the analogues are also available precoloured or can be coloured in different colours by anodizing with the Titanium Spectral-Colouring Anodizer





NEW! WHITE SCANMARKER



ALSO FOR VERY UNFAVOURABLY POSITIONED IMPLANTS

- For capturing the position and orientation of the implant during scanning processes and for proper aligning of the restoration in the CAD/CAM software
- Made from ceramic-reinforced polyetheretherketone (PEEK)
- Non-reflecting
- Especially suitable for use in the mouth of the patient
- A scanmarker can be positioned for each implant, despite them being positioned very deeply in the gingiva or closely together

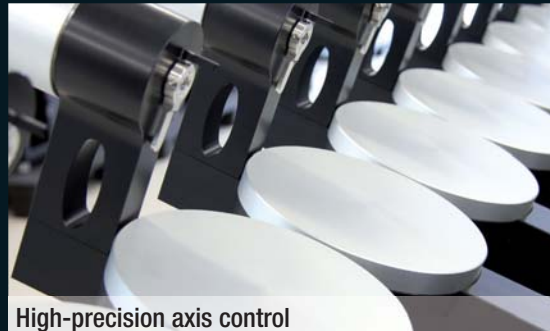


WHITE SCANMARKERS MADE FROM PEEK IN THE CAST

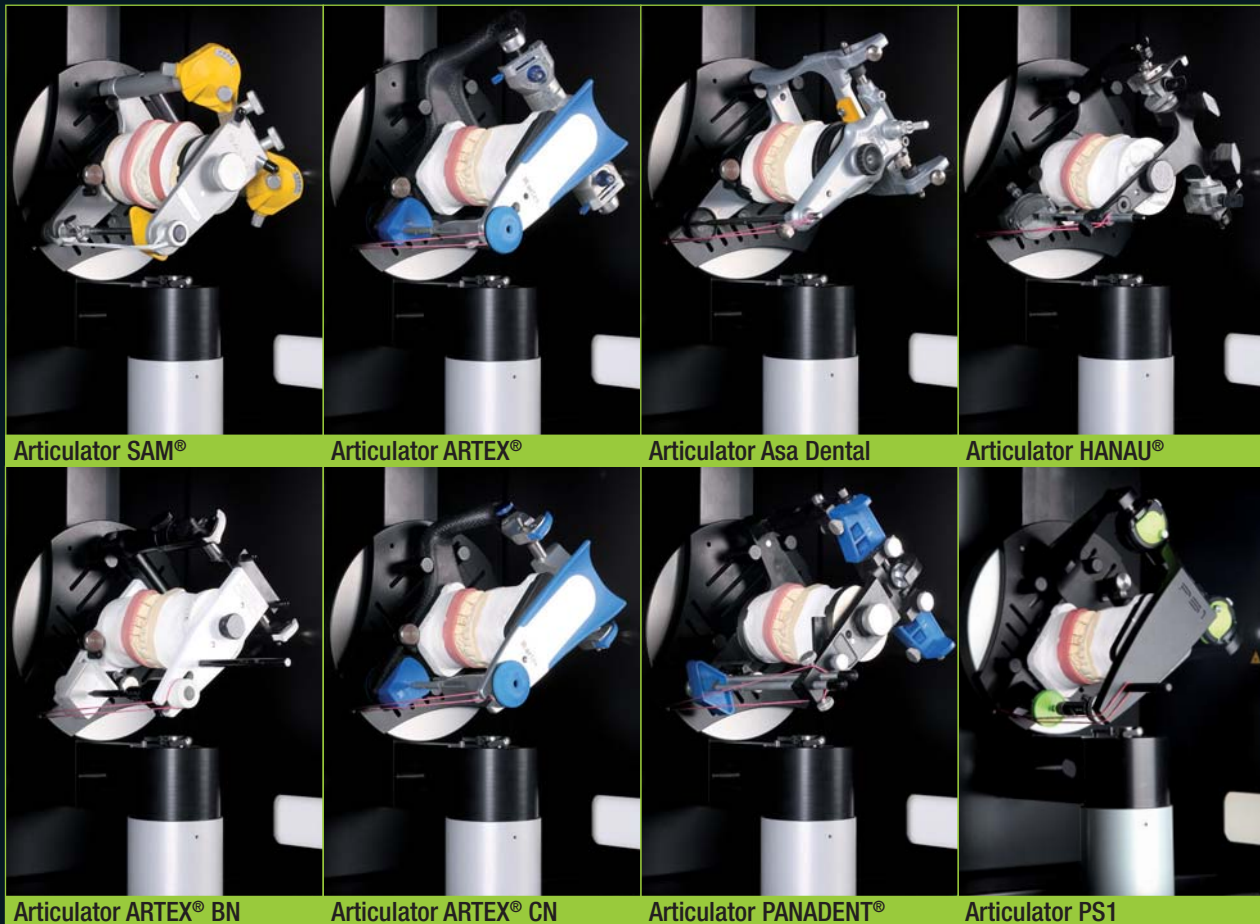


SCANNER S600 ARTI

- *In combination with the modeling software the ideal introduction to the digital world of dental prostheses, also without a milling unit*
- *Fully automated optical structured-light scanner*
- *Precision $\leq 10 \mu\text{m}$*
- *Model can be rotated 360° and tilted 100°*
- *Particularly large measuring field enables the capture of the entire model in a single scanning process*
- *High-precision axis control*
- *Intelligent model acquisition concepts*
- *Compatible with the PlaneSystem®*



SCANNER S600 ARTI



Scanning of master casts in the laboratory's own articulator – exact transmission of the position into the virtual articulator of the modeling software



MOCK-UP SUPPORT EASY-FIX-SYSTEM

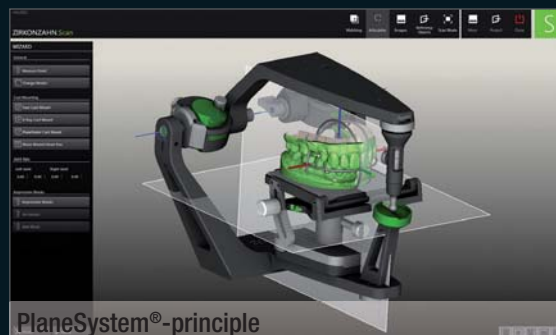
- For quick and simple capturing of non-articulated models in the Scanner S600 ARTI
- Intelligently refined capturing concept with a magnetic backing plate and flexible support pins for central positioning of all models in the Scanner S600 ARTI
- Firmly attached mock-up support basis with easily removable magnetic model backing plate
- The additional clamping device allows fixing of non-articulated models and occlusal antagonists
- Fixing of smaller models with the aid of a clamping claw
- The Multi-Die Holder makes it possible to scan multiple dies from the upper and the lower jaw at the same time and subsequently assign them freely in the software



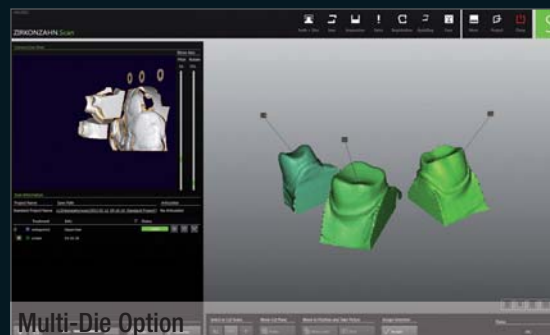
SCAN-SOFTWARE – EVEN FASTER AND EASIER SCANNING

- Virtual articulation, even conform to the new PlaneSystem®-principle
- Timesaving intelligent workflow – one model can be scanned, while simultaneously the scan of another model is being calculated
- Multi-Die Option – several dies can be scanned at the same time and subsequently assigned freely in the software; the registration of a 14 elements bridge takes merely 45 seconds
- Fine Adjustment Function – for a more precise positioning of models in the articulator
- Scan of impressions and double impressions
- Scan-and-Match Function – scans from multiple sides can subsequently be assembled in the software
- Duplication of scans

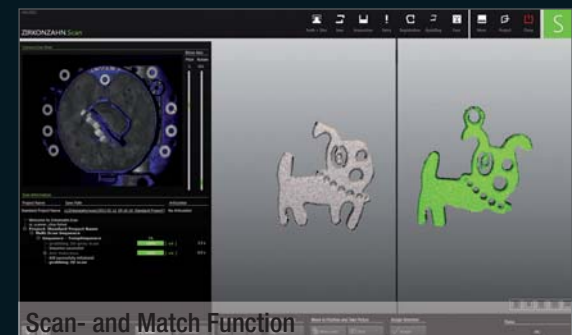
ZIRKONZAHN.Scan



PlaneSystem®-principle



Multi-Die Option



Scan- and Match Function

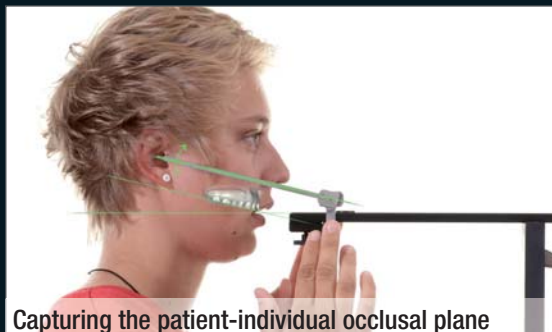
PLANESYSTEM®

THE THIRD DIMENSION IN PATIENT ANALYSIS

- *A new approach for the transmission of patient's planes*
- *Capturing of patient-individual occlusal plane and asymmetries with the aid of the Ala-Tragus Line and the Natural Head Position (NHP)*
- *No transmission errors due to facial arc or transfer bow*
- *Ideally combinable with the facial scanner Face Hunter*
- *Integrates extremely well into the digital workflow*
- *Developed in cooperation with MDT Udo Plaster*

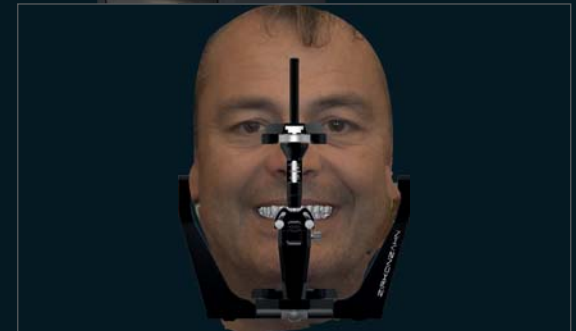
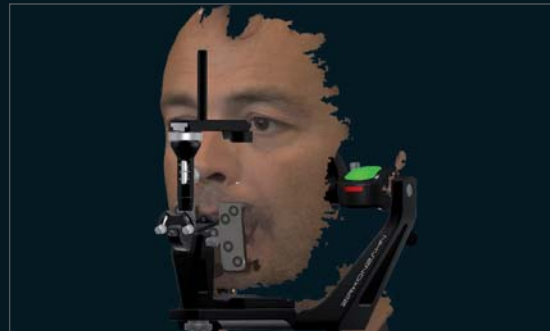
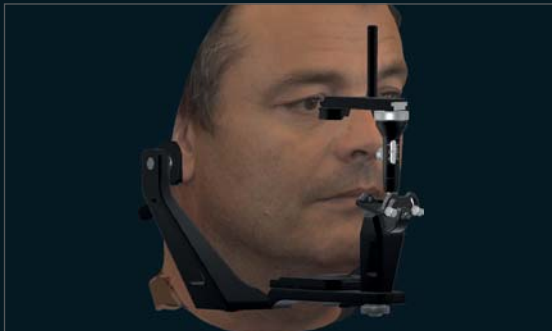
PLANESYSTEM® COMPONENTS:

- *PlaneFinder® – for capturing the natural head position and the occlusal line angle*
- *PlanePositioner® – for fixing and setting the models in the articulator PS1*
- *Articulator PS1 – with special geometries for a correct articulation of the upper jaw*
- *CAD-PlaneTool PS1-3D – software for assigning of teeth and modelation on the virtual articulator in the modeling software*



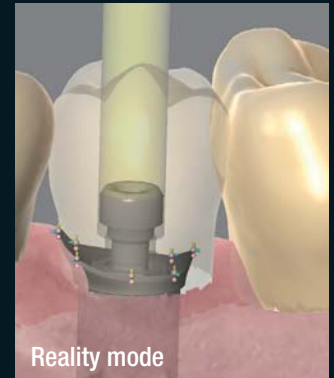
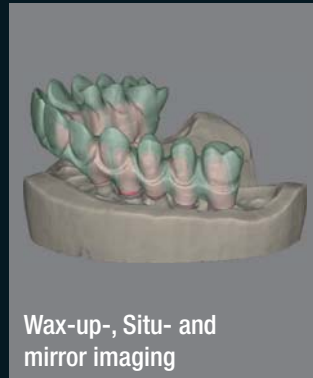
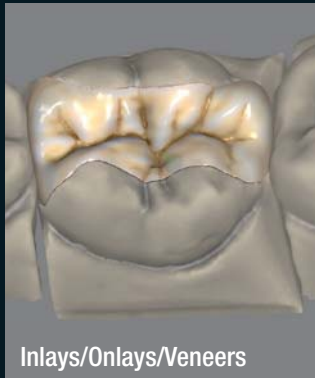
3D-FACIAL SCANNER – FACE HUNTER

- *Scanner for photo-realistic 3D digitisation of faces*
- *Planning reliability for the dental technician, the dentist and the patient through the manufacture of tooth restorations on the basis of the patient's physiognomy*
- *Intuitive controls: digitisation with only one click*
- *High scanning speed: less than 0.3 seconds per face*
- *Integrates extremely well into the Zirkonzahn workflow*
- *Ideal in combination with the Software-Module CAD/CAM Reality Mode*
- *The representation can be exported in PDF or OBJ format*
- *Also suitable for mobile use with laptop*
- *100 % compatible with the PlaneSystem® virtual articulator PS1-3D*

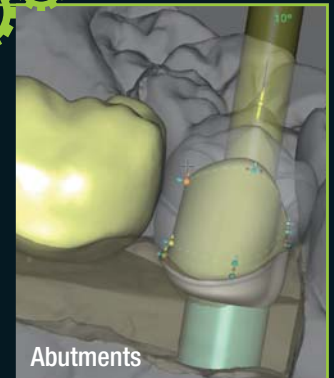
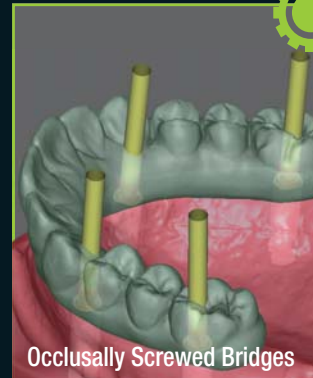
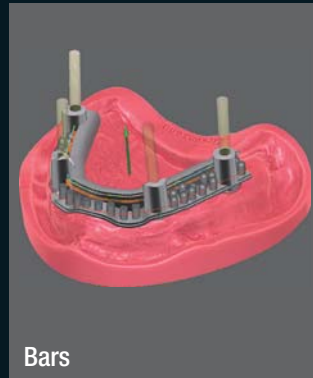


SOFTWARE-MODULES CAD/CAM FOR ALL ZIRKONZAHN MILLING UNITS

BASIC

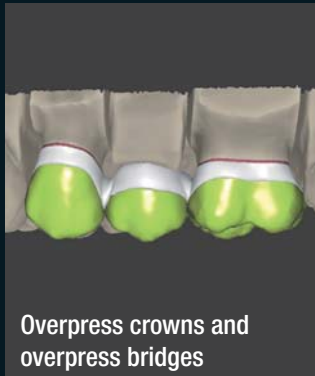


ADVANCED

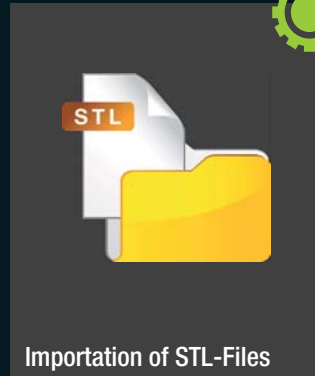




MASTER



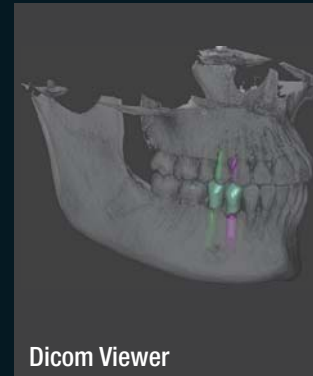
Overpress crowns and
overpress bridges



Importation of STL-Files



Jewellery

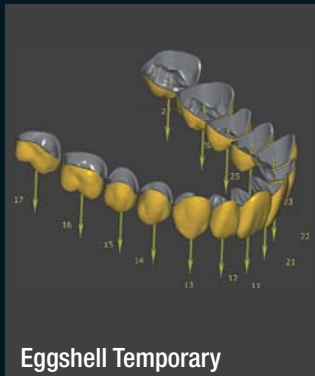


Dicom Viewer



Bite Splints

MASTER



Eggshell Temporary



Model Maker



Dental casting work



Mock-Up



Only works in
combination



Recommended
as unities



Recommended
as unities



Additional modules

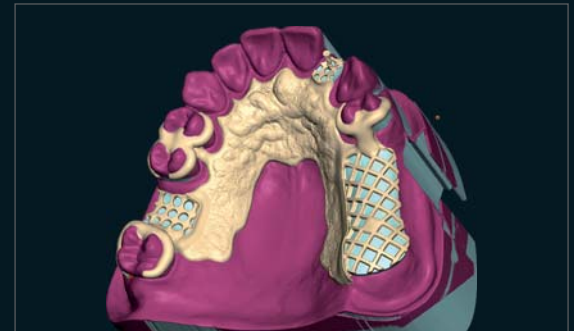
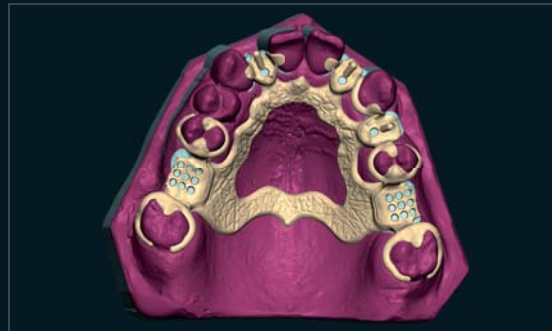
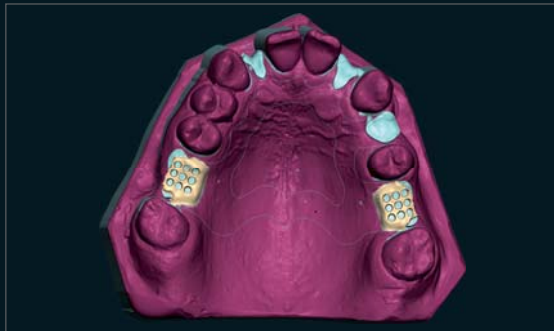
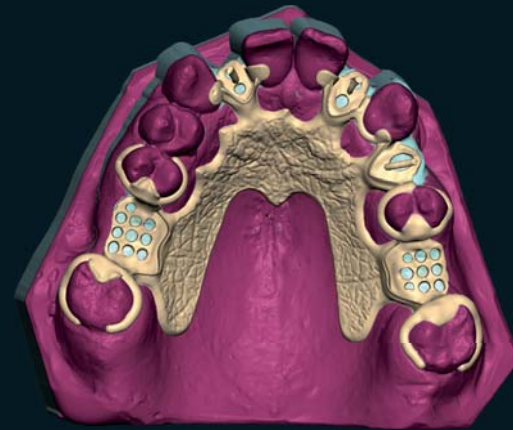
NEW! SOFTWARE-MODUL CAD/CAM MOCK-UP

- Possibility of combining digital data with facial scans or photos for an easy and quick first digital positioning of the teeth
- Possibility of quick and easy production of Mock-Ups for an in mouth preview of the final result
- Design of the restoration, taking into account aesthetic parameters based on facial scans or photos
- Realistic representation of the final result in the software (e.g. photorealistic representation of various tooth shades)
- Photo-match function: Possibility of matching of facial scans and photos in the software
- Auxiliary construction lines and planes can be displayed in the software
- Compatible with the PlaneSystem®



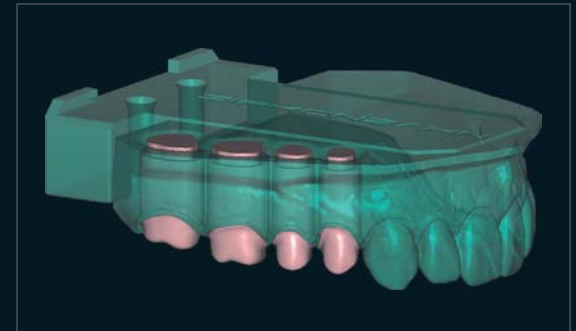
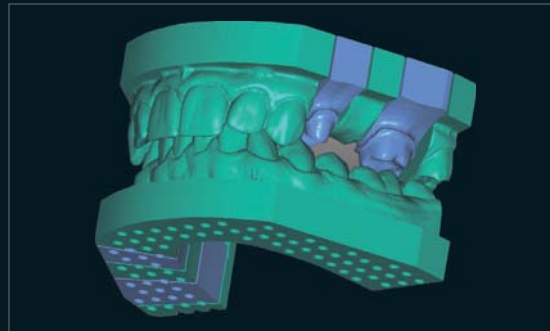
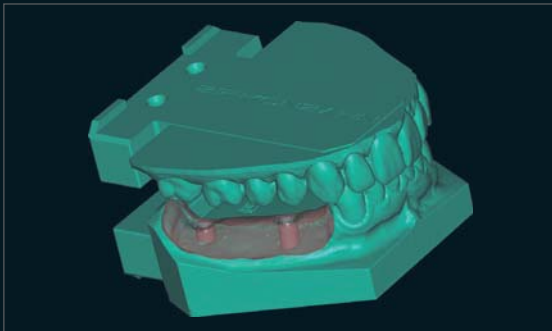
NEW! SOFTWARE-MODULE CAD/CAM DENTAL CASTING WORK

- *No working model preparation necessary*
- *Automatic undercut block out of the model in the defined path of insertion*
- *Wide choice of various types of clasps, rest seats, saddles etc.*
- *Simple profile design of metal/resin border*
- *Simple design of transverse bars and their surfaces*
- *Simple design of clasps, retentions, rest seats also via the freeform tool*
- *Simple modeling ability of different types of retentions or chrome saddles*
- *Extensive library of different digital preforms*



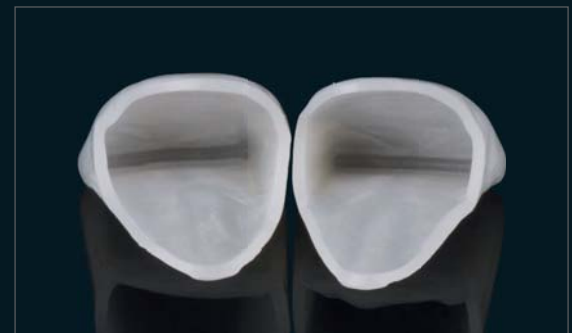
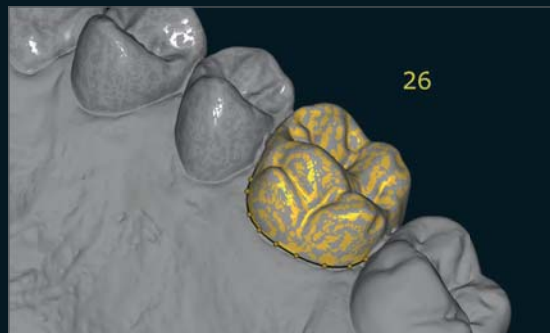
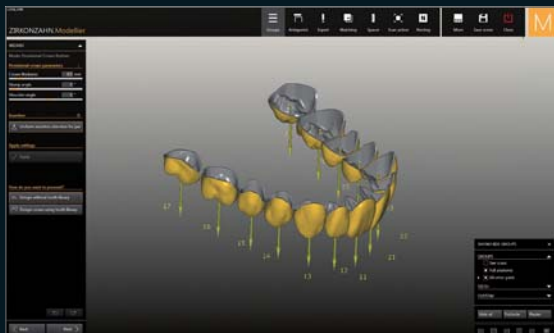
NEW! SOFTWARE-MODULE CAD/CAM MODEL MAKER

- *Manufacturing ability for dental models from intraoral scan data*
- *Manufacturing ability for dental models by scanning impressions*
- *Manufacturing ability for Geller models (with removable dies and teeth)*
- *Manufacturing ability for models with glued or screwed (axial and transverse) implant analogs*
- *Manufacturing ability for models with separate dies or dental arches on software stored base plates*
- *Automatic alignment of the scan data in occlusion*
- *Articulating scan data with different kinds of connections (e.g. special positioning plates for split-cast system or mini articulators)*
- *Manufacturing of hollow casts for 3D printers (material saving)*
- *Customized set of parameters (distance between model and die, model thickness etc.)*
- *Automatic margin and undercut identification*



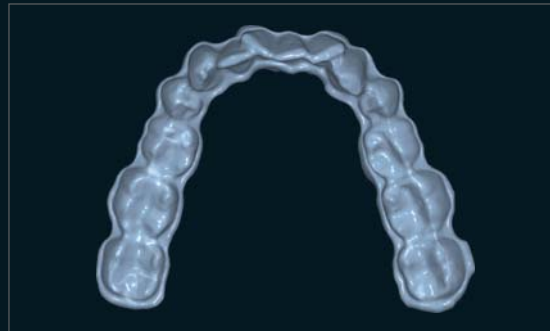
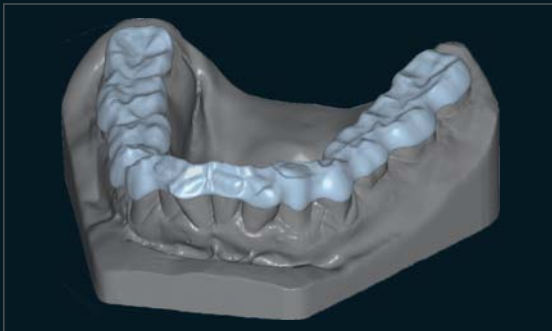
SOFTWARE-MODULE CAD/CAM EGGSHELL TEMPORARIES

- *Module for the manufacture of individual eggshell temporaries*
- *Aesthetically pleasing and individually designed immediate restoration*
- *Adjustable parameters: preparation depth, preparation type and wall thickness*
- *Can be designed extremely thin (0.3 mm) and is easily adaptable*
- *Allows import of intraoral scan data*



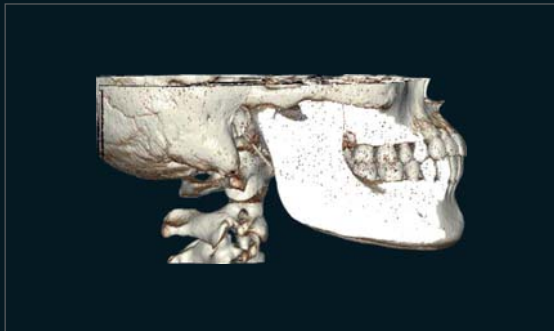
SOFTWARE-MODULE CAD/CAM BITE SPLINTS

- *Module for the manufacture of bite splints*
- *Precise modeling of the necessary contact points in conjunction with the virtual articulator*
- *Individual shaping*
- *Adjustable parameters: occlusal strength, wall thickness, smoothness (blocking-out)*
- *Especially recommended with the flexible resins Temp Premium Flexible and Temp Premium Flexible Transpa*



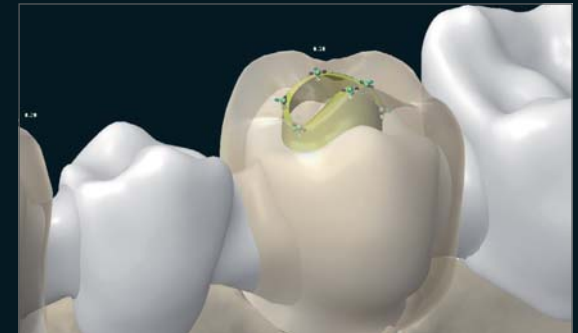
SOFTWARE-MODULE CAD/CAM DICOM VIEWER

- *Module for visualizing DICOM data and for saving various layers as STL files to use them in the software, e.g. drilling templates*
- *Suitable for full integration of three-dimensional images of the jaw into the software and jaw-related manufacturing of the models*



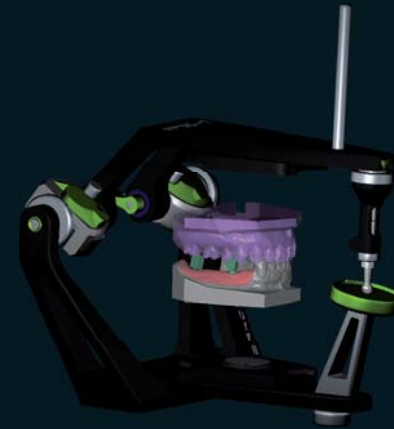
SOFTWARE-MODULE CAD/CAM REALITY MODE

- *Module for realistic 3D representations of teeth, tooth colors, gingiva and the model*
- *Very detailed representations for much greater planning reliability*
- *A better way to present the final work to the patient and the dentist*



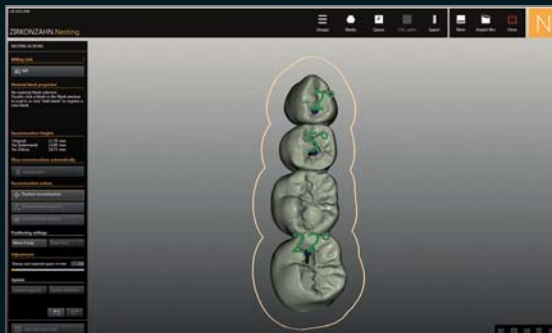
SOFTWARE-MODULE CAD/CAM VIRTUAL ARTICULATOR

- *Module for movement simulation of the mandibular joint in the articulator*
- *The dental technician can measure and scan his own articulator in the scanner and then deposit its data in the software library*
- *All movements are recreated virtually*
- *Dynamic adaption of constructed contact points to the antagonist taking into account the masticatory movements*
- *If a split-cast system is used, the jaws are articulated automatically*



SOFTWARE-MODULE CAD/CAM IMPORTATION OF STL-FILES

- *Module for nesting and milling of finalized tooth restoration files of other milling systems in the open STL format*



SOFTWARE-MODULE CAD/CAM JEWELLERY

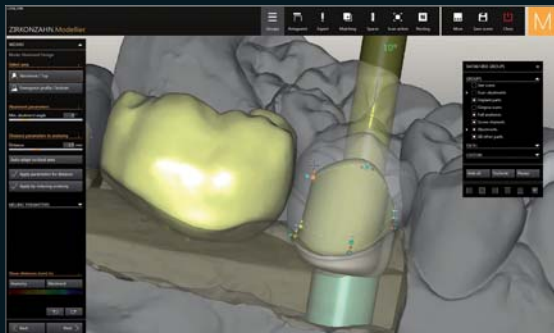
- *Module for the manufacture of geometric shapes as a basis for rings, pendants and other fancy creations*
- *Contains special milling strategies and basic shapes*
- *An external software is required for creating your own forms**
- *Attention* – only works in combination with the *Software-Module CAD/CAM Importation of STL-Files*

**e.g. Google Sketchup*



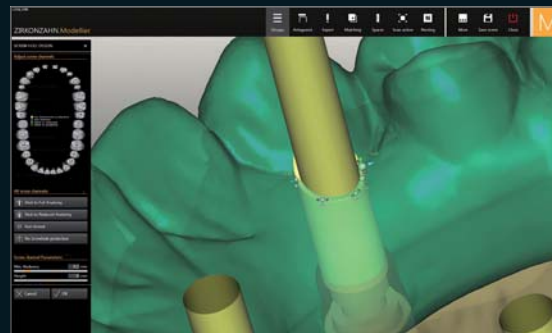
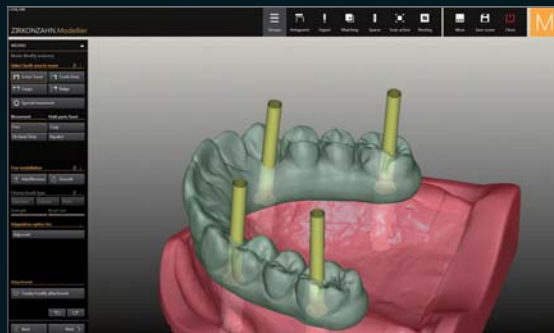
SOFTWARE-MODULE CAD/CAM ABUTMENTS

- *Module for the manufacture of individualized abutments and their emergence profiles*
- *Creates abutments taking into account the secondary construction. After the completion, they can both be milled at the same time*
- *Adjustable parameters: distance to secondary construction, shrinkage, etc.*
- *Semi-transparent hiding of the outer tooth form, which makes the creation of abutments much easier*
- *Supports a large variety of implant systems (already included in the software) that can be constructed either as directly screwed or as bonded titanium base*
- ***Attention** – only works in combination with the Software-Module CAD/CAM Occlusally Screwed Bridges*



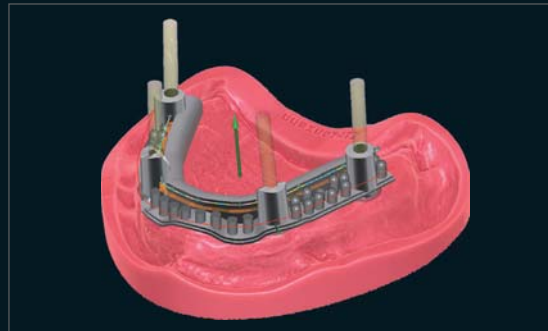
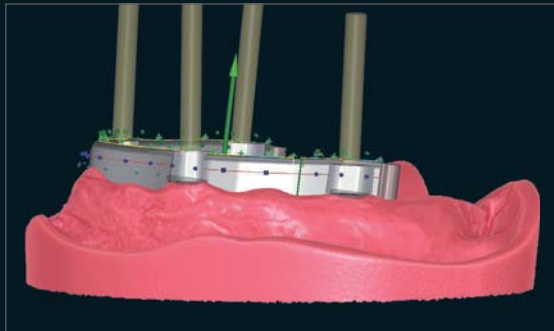
SOFTWARE-MODULE CAD/CAM OCCLUSALLY SCREWED BRIDGES

- *Module for the creation of occlusally screwed bridges and bars with individual profiles*
- *Free shaping of the emergence profile, taking into account the anatomic tooth shape and gingiva*
- *The software calculates the alignment of the already included implants with the help of the scanmarker and uses it for the exact alignment of the screw channels*
- **Attention** – the Software-Modules CAD/CAM Abutments and Occlusally Screwed Bridges only work if combined



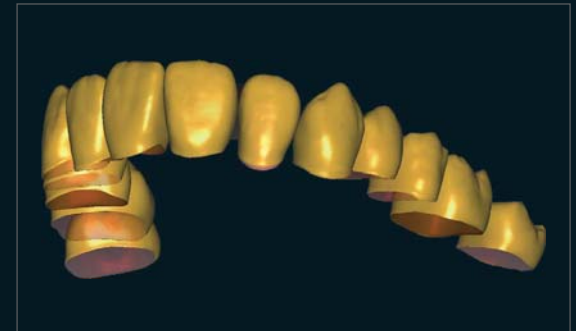
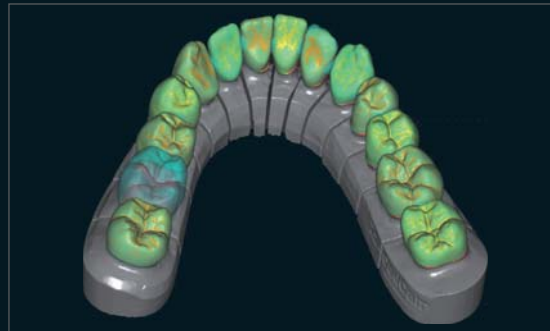
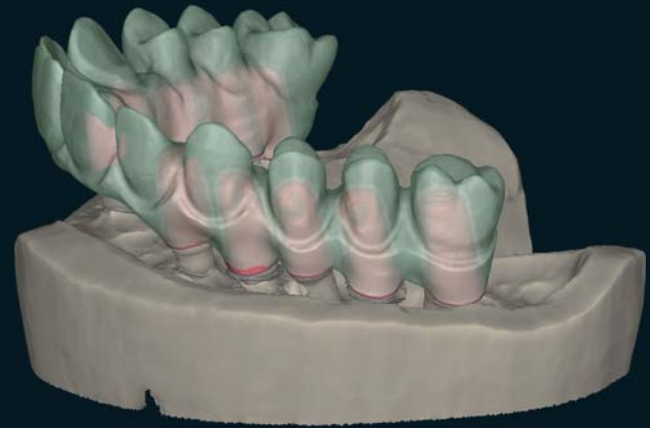
SOFTWARE-MODULE CAD/CAM BARS

- *Module for the individual manufacture of primary and hybrid bars (also implant-supported)*
- *Freely customizable emergence profile*
- *Semi-transparent hiding of the outer tooth form or separate situation scans, this greatly facilitates the manufacture of bars*
- *Different types of bars can easily be modified*
- *Adjustable parameters: heights, thickness, lingual and buccal angle, minimum size and thickness as well as many other individualisation options*
- *Both attachments and retentions as well as anchorages can be fixed*



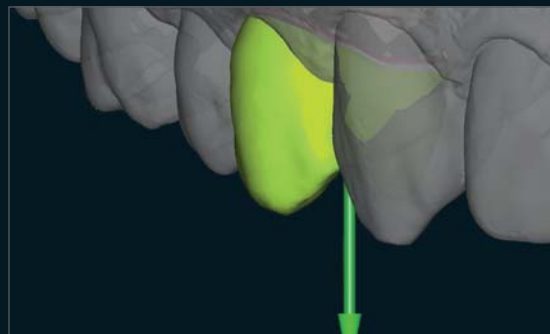
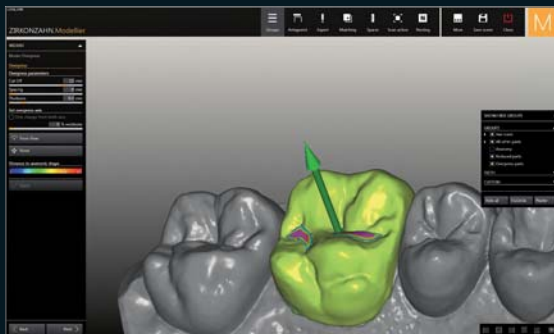
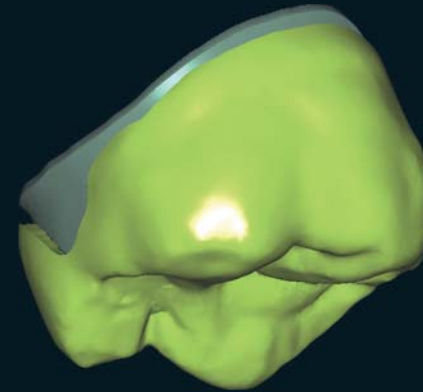
SOFTWARE-MODULE CAD/CAM WAX-UP/SITU/MIRROR IMAGING

- *Module for virtual copying of scanned wax or resin modelations (double scan)*
- *The existing situation can be directly taken from a situation model. This way, aesthetically pleasing models can be used as anatomical template*
- *Time-saving and perfect copying of the opposing teeth is made possible through mirroring of the master model*



SOFTWARE-MODULE CAD/CAM OVERPRESS CROWNS AND OVERPRESS BRIDGES

- *Module for the manufacture of virtual overpress crowns and overpress bridges*
- *Adjustable parameters: shrinking, minimum thickness, shrinking on lingual side, thickness of the overpress crown/overpress bridge*
- *Parallel construction of primary frameworks*



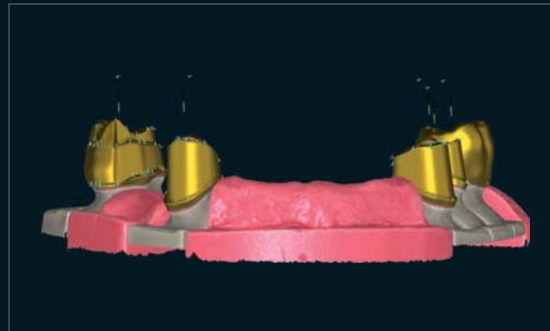
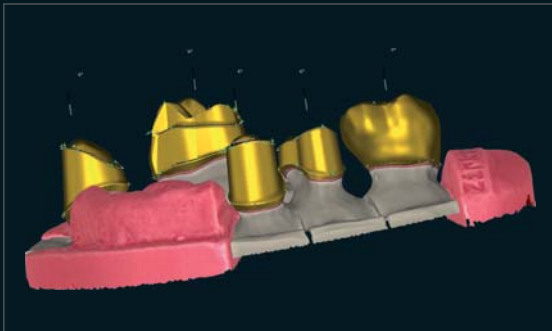
SOFTWARE-MODULE CAD/CAM ATTACHMENTS

- *Module for the manufacture of attachments*
- *Adjustable parameters: attachment height, thickness, lingual and buccal angle, minimum height and thickness*
- *Many different shapes that can individually be adapted to the gingiva are included in the software library*



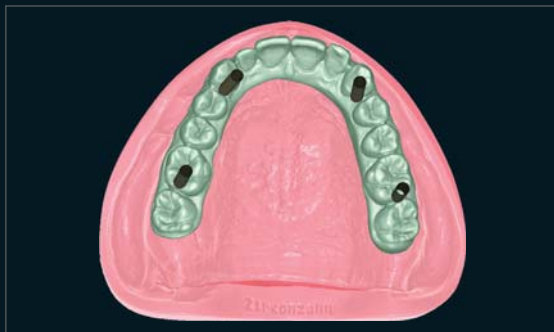
SOFTWARE-MODULE CAD/CAM TELESCOPIC CROWNS

- *Module for the individual creation of one or more telescopic or conical crowns*
- *Individual adjustment of the friction surface's angle is possible*
- *Ring telescopes can be constructed with occlusal surface*
- *It is also possible to shape the telescopic or conical crowns only partially*
- *Telescopic/conical crowns can be shaped on implants*
- *Fully anatomical crowns and telescope combinations are also possible*



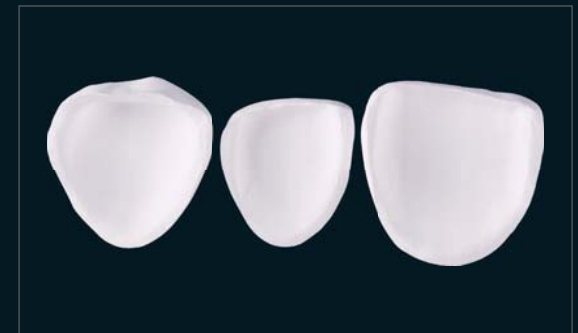
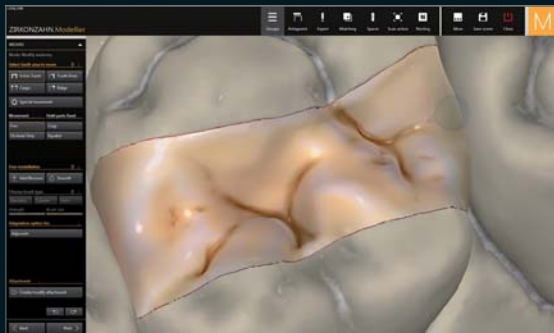
SOFTWARE-MODULE CAD/CAM PRETTAU® (FULLY ANATOMIC)

- *Module for the manufacture of fully anatomical works*
- *Enables the exact reduction of the fully anatomical modelations as the basis for a evenly strong ceramic layering – this way, the danger of ceramic chipping can be minimized*
- *Greater freedom of design in case of restricted spaces*
- *In combination with the specially developed coloring technique for full zirconia bridges without ceramics, a Prettau® Bridge can be manufactured*



SOFTWARE-MODULE CAD/CAM INLAYS/ONLAYS/VENEERS

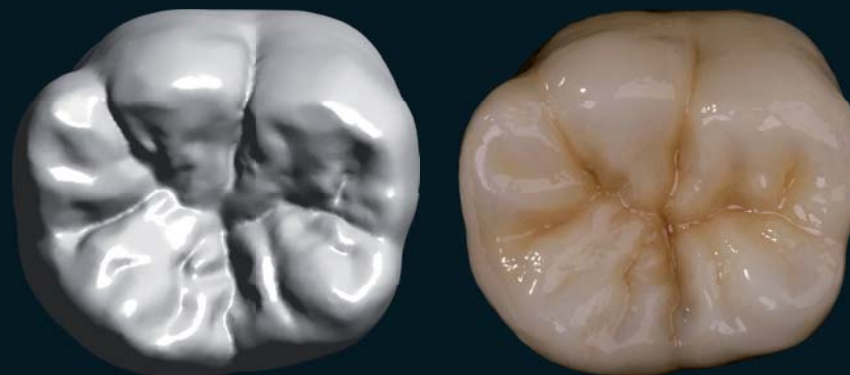
- *Module for the modelation of inlays, onlays and veneers*
- *For the manufacture of inlays, veneers or Maryland bridges*
- *Adjustable parameters: cement space, inlay border width, milling bur diameter, distance to adjacent teeth, minimum thickness, etc.*
- *For fully anatomical or reduced design for veneering with ceramics*





VIRTUAL LIBRARY HEROES COLLECTION

- *Aesthetic base for any kind of restoration: single crowns, small bridges, fully anatomical bridges (Prettau® Bridges), complete dentures*
- *10 natural and aesthetically pleasing tooth sets*
- *Fully anatomical or in 4 Cut-Back designs FIRE, WATER, AIR, EARTH for veneering with ceramics*
- *Individual adjustments for any patients possible*
- *Combinable with the natural tooth substance, e.g. if only the occlusal surface of the tooth is abraded*
- *Different occlusal concepts can be realised, e.g. canine or posterior tooth guidance*
- *Also available as book edition*



OPEN AND UPGRADEABLE MILLING UNITS



MILLING UNIT M1 ABUTMENT

- *4 axes milling technology*
- *For processing of Raw-Abutments®, Bridge-Rods, glass ceramics and composite*
- *Milling Spindle Hard Automatic*
- *Tool Changer function with 6-fold Tool Magazine*
- *CAD/CAM Milling Bur 6 mm for more stability during milling*
- *Wet processing*
- *Particularly space-saving*



MILLING UNIT M1 SOFT

- *5+1 axes simultaneous milling and orbit technology*
- *For processing of zirconia, resin, wax, wood and sinter metal*
- *Milling Spindle Soft Automatic*
- *Tool Changer function with 8-fold Tool Magazine*
- *Particularly space-saving*



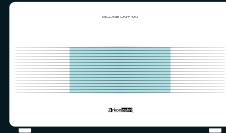
MILLING UNIT M1 WET

- *5+1 axes simultaneous milling and orbit technology*
- *For processing of zirconia, resin, wax, wood, sinter metal, glass ceramics and composite*
- *Milling Spindle Soft Automatic*
- *Tool Changer function with 8-fold Tool Magazine*
- *CAD/CAM Milling Bur 6 mm for more stability during milling*
- *Wet processing*
- *Particularly space-saving*



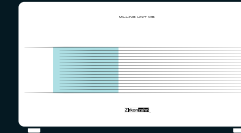
MILLING UNIT M1 WET HEAVY METAL

- 5+1 axes simultaneous milling and orbit technology
- For processing of zirconia, resin, wax, wood, sinter metal, chrome-cobalt, titanium, glass ceramics, composite as well as Raw-Abutments® and Bridge-Rods depending on equipment
- Milling Spindle Soft Automatic
- Tool Changer function with 8-fold Tool Magazine
- CAD/CAM Milling Bur 6 mm for more stability during milling
- Individual extension options, e.g. Raw-Abutment® Holder, Bridge-Rod Holder
- Wet processing
- Particularly space-saving



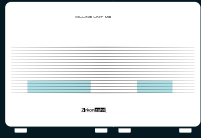
MILLING UNIT M4

- 4+1 or 5+1 axes simultaneous milling technology
- For processing of zirconia, resin, wax, wood, sinter metal, chrome-cobalt, titanium, as well as Raw-Abutments®, Bridge-Rods, glass ceramics and composite depending on equipment
- Extra large milling area for mass production of models (for up to 20 full arches)
- Milling Spindle Hard Automatic
- Tool Changer function with 32-fold Tool Magazine
- CAD/CAM Milling Bur 6 mm for more stability during milling
- Wet processing
- Different supports for simultaneously processing of different materials (Raw-Abutments®, glass ceramics, metal and resin): 2- and 4-Blank-Plate, Raw-Abutment® Holder, Bridge-Rod Holder, Glass Ceramics Holder



MILLING UNIT M5 HEAVY

- 5+1 axes simultaneous milling and orbit technology
- For processing of zirconia, resin, wax, wood, sinter metal, chrome-cobalt as well as titanium, Raw-Abutments®, Bridge-Rods, glass ceramics and composite depending on equipment
- Milling Spindle Hard Automatic
- Tool Changer function with 16-fold Tool Magazine
- CAD/CAM Milling Bur 6 mm for more stability during milling
- Individual extension options, e.g. wet processing function WetGrinding/Wet Milling M5, Raw-Abutment® Holder



MILLING UNIT M6

- 5+1 axes simultaneous milling and orbit technology
- For processing of zirconia, resin, wax, wood, sinter metal, chrome-cobalt, titanium, glass ceramics, composite as well as Raw-Abutments® and Bridge-Rods, depending on equipment
- Blank Changer function with 3-14-fold Blank Magazine
- Tool Changer function with 8-49-fold Tool Magazine
- Milling Spindle Hard Automatic
- CAD/CAM Milling Bur 6 mm for more stability during milling
- Wet processing
- Individual extension options, e.g. Raw-Abutment®, Holder, Bridge-Rod Holder



SCANNER S600 ARTI

- Fully automated optical structured-light scanner
- Twin camera scanning
- High-speed cameras
- Extra large measuring field
- Intelligent model registration concepts
- Scan of all types of articulators
- High-precision axis control
- Compatible with the PlaneSystem®

FULL GLAZING WITH INDIVIDUAL DESIGN:





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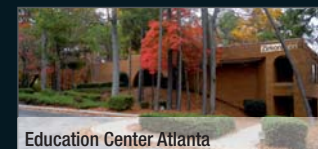
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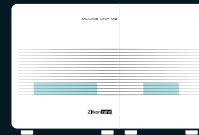
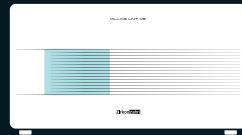
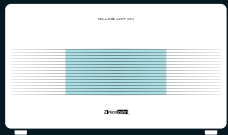


Education Center Atlanta

TECHNICAL SPECIFICATIONS



	MILLING UNIT M1 ABUTMENT	MILLING UNIT M1 SOFT	MILLING UNIT M1 WET	MILLING UNIT M1 WET HEAVY METAL
Weight	105 kg	105 kg	105 kg	105 kg
Width	47,7 cm	47,7 cm	47,7 cm	47,7 cm
Height	69 cm	69 cm	69 cm	69 cm
Depth	61 cm	61 cm	61 cm	61 cm
Glass lining	Hardened Sircuit glass UNI ISO 12150	Hardened Sircuit glass UNI ISO 12150	Hardened Sircuit glass UNI ISO 12150	Hardened Sircuit glass UNI ISO 12150
Processing axes	4	5+1	5+1	5+1
Power capacity	600 W	600 W	600 W	600 W
Operating voltage	230 V (115 V)	230 V (115 V)	230 V (115 V)	230 V (115 V)
Power input	2,6 A (5,5 A)	2,6 A (5,5 A)	2,6 A (5,5 A)	2,6 A (5,5 A)
Chuck	Ø 6 mm	Ø 3 mm	Ø 6 mm	Ø 6 mm
Spindle speed	Standard version: max. 50,000 U/min	Standard version: max. 50,000 U/min	Standard version: max. 50,000 U/min	Standard version: max. 50,000 U/min
Spindle motor	200 W	100 W	100 W	200 W
Block diameter		Ø 95 mm	Ø 95 mm	Ø 95 mm



MILLING UNIT M4

MILLING UNIT M5 HEAVY

MILLING UNIT M6

SCANNER S600 ARTI

280 kg	210 kg	210 kg	68 kg
115 cm	123,2 cm	115 cm	47,7 cm
69 cm	69 cm	69 cm	69 cm
66,5 cm	53 cm (plus connection for suction unit)	61 cm	41 cm
Hardened Sircuit glass UNI ISO 12150	Hardened Sircuit glass UNI ISO 12150	Hardened Sircuit glass UNI ISO 12150	Hardened Sircuit glass UNI ISO 12150
5+1	5+1	5+1	2
1500 W	600 W	600 W	200 W
230 V (115 V)	230 V (115 V)	230 V (115 V)	230 V (115 V)
6,5 A (13,5 A)	2,6 A (5,5 A)	2,6 A (5,5 A)	0,9 A (1,9 A)
Ø 6 mm	Ø 6 mm	Ø 6 mm	
Standard version: max. 50,000 U/min	Standard version: max. 50,000 U/min	Standard version: max. 50,000 U/min	
600 W	100 W	200 W	
Model blanks / Ø 95 mm	Ø 95 mm	Ø 95 mm	

100 % PRETTAU® ANTERIOR – MADE BY CAD/CAM

- *Prof. Dr. Wael Att – University Clinic of Freiburg, Germany*
- *MDT Manfred Pörnbacher – Zirkonzahn Education Center Brunico, Italy*





100 % PRETTAU® ZIRKON – MADE BY CAD/CAM

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