

# SILADENT

digital



Our  
CAD-CAM  
system world

Scanner  
Software  
Milling machines  
3D Printer  
Sintering furnaces  
Milling materials  
Milling tools  
Polisher  
Accessories

[www.siladent.de](http://www.siladent.de)

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# SILADENT

## digital

## Welcome to CAD-CAM system world of SILADENT

As an innovative and independent family owned company in the dental field we built up a high level of technical competence in conjunction with distinctive quality products. We will preserve and enhance this technical competence.

The general economical conditions change well-known and approved structures in the dental sector as well. We have rendered high-end service and support in the past (for our partners in lab and whole sale trade) and will preserve this for the future, which is the focus of our business philosophy.

An important basis for our success are good educated and high motivated employees. With our social liability for employees and environment we try to measure up the expectations of our clients and partners.

**In accordance to our guiding principle „from technicians for technicians“ we provide a comprehensive service with heart and hand.**

### Imprint

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# scanBox / Vinyl open air



**scanBox**



**Vinyl Open Air**

MADE IN GERMANY | SOFTWARE | OPTICAL DENTAL SCANNER | ERGONOMIC | PRECISION

The scanBox is a fully automated, open 3D dental scanner. It can be used with every open CAD software. It is suited for beginners as well as professional users who look to easy, quick and cost-effective manufacturing. The scanBox is a safe investment as there are no licence fees for the scanner.

- ✓ dental Scan
- ✓ secondDie
- ✓ monochrome texture-scan
- ✓ universal mode

🔗 multiDie 🔗 multiCase 🔗 Triple Tray® impression scan

🔗 is available as an option

The Vinyl Open Air is a real eye-catcher and the only completely open scanner of the Vinyl series from smart optics. Its 180° opening offers the user enormous space for inserting the models during daily routines. Despite the missing lid, the productivity of the Vinyl series is also ensured with the Vinyl Open Air.

- ✓ fully automated Z-axis
- ✓ virtual articulator
- ✓ monochrome & colored texture-scan
- ✓ Touchscreen
- ✓ dental Scan
- ✓ secondDie
- ✓ universal mode

🔗 multiDie 🔗 multiCase 🔗 Triple Tray® impression scan

# Vinyl / Vinyl high resolution

smart optics



**Vinyl**



**Vinyl High Resolution (HR)**

CRANIUM-BASED MEASUREMENT | INNOVATION | FAST | EASE OF USE | OPEN INTERFACE

The Vinyl dental scanner has been especially designed for achieving a maximum of productivity in the daily laboratory work. It is up to you to decide whether you wish to prepare a monochrome or a color texture scan. Save considerable time with the fully automated z-axis.

- ✓ fully automated Z-axis
- ✓ secondDie and multiDie
- ✓ monochrome & colored texture-scan
- ✓ dental Scan
- ✓ Triple Tray® impression scan
- ✓ multiCase
- ✓ Touchscreen
- ✓ virtual articulator
- ✓ universal mode

The Vinyl HR impresses with the highest precision in global and detail accuracy, which enables the user to scan every dental indication to the highest requirements.

- ✓ high resolution camera
- ✓ fully automated Z-axis
- ✓ monochrome & colored texture-scan
- ✓ Blue-Light LED
- ✓ HR and LR mode
- ✓ Triple Tray® impression scan
- ✓ multiCase
- ✓ Touchscreen
- ✓ LED status bar
- ✓ dental Scan
- ✓ virtual articulator
- ✓ secondDie und multiDie
- ✓ universal mode



## exocad<sup>®</sup> DentalCAD

### The complete software solution for digital dentistry



- ✓ powerful dental CAD-Software
- ✓ great for beginners, yet powerful in the hands of an expert

The CAD software is known for its speedy operation and ease of use, helping you minimize training costs and maximize productivity. It is reliable and robust even when dealing with complex cases on a daily basis. Once you're familiar with the base functionality of our software, there's more to discover:

- ✓ Copy previous designs, or mirror healthy teeth
- ✓ Load 2D images during the design
- ✓ Take advantage of our advanced mesh editing and matching features
- ✓ Save real 3D PDF files, to send out design previews that can be viewed in 3D using a standard PDF viewer
- ✓ Exchange large 3D data sets with dentalshare

Already the standard version, exocad<sup>®</sup> DentalCAD covers a wide variety of indications:

- ✓ Anatomic crowns
- ✓ Anatomic copings
- ✓ Bridge framework
- ✓ Inlays
- ✓ Onlays
- ✓ Primary telescopes
- ✓ Veneers
- ✓ Waxup based frameworks
- ✓ Attachments
- ✓ Model creator
- ✓ Splints
- ✓ full denture

The software grows with your needs: for advanced indications, such as implantology, a variety of add-on modules is available.

exocad  
ChairsideCAD

optimized for clinical use:  
more automation and a simplified user experience

only as flex licence available



exoplan

Our powerful, user-friendly and open software solution for Implant treatment and surgical template design

only as flex licence available







## exocad<sup>®</sup> DentalCAD

Perpetual License	Core Lab Version	Advanced Lab Bundle	Implant Lab Bundle	Ultimate Lab Bundle
CAD Basic version	✓	✓	✓	✓
Module Virtual Articulator	✗	✓	✓	✓
Provisional Module	✗	✓	✓	✓
Module TruSmile	✗	✓	✓	✓
Module Tooth Library ZRS	✗	✓	✓	✓
Module Implant (Abutments)	✗	✗	✓	✓
Bar Module	✗	✗	✓	✓
Module Dicom Viewer	✗	✗	✓	✓
Module Model Creator	✗	✗	✗	✓
Module Smile Creator	✗	✗	✗	✓
Module Full Denture	✗	✗	✗	✓
Module PartialCAD	✗	✗	✗	✓
Module Bite Splint	✗	✗	✗	✓
Module Jaw Motion Import / Zebris	✗	✗	✗	✓
Module In-CAD Nesting	✗	✗	✗	✗
Module Nesting (incl. In-CAD Nesting)	✗	✗	✗	✗

✗ is available as an option



profiCAD dental

## The digital production of models

milling precision in own lab  
for the highest demands



DATA IMPORT



PREPARATION



NESTING



MILLING PROCESS

### Digital production of models

The economical solution for the digital production of models by subtractive milling and highest precision.

- ✓ Open system, compatible with all 5-axis milling systems using 98.5 mm diameter discs.
- ✓ Unique SilaCAD Software for the digital editing of intraoral scans.
- ✓ Additional SilaCAM software for the execution of the milling process.
- ✓ No license fees
- ✓ Full milled arches in 30-45 minutes.
- ✓ Ready-made preformed gypsum milling blank on a pin-base plate with Orbix-articulator or split-cast for fully-fledged articulation.
- ✓ Available for partial and full arches for
  - ✓ profiCAD - ERNST HINRICHS / SILADENT
  - ✓ model tray®-system / model-tray

### SilaCAD Software

A specially developed CAD construction software for the edition of digital intraoral scans. Handling of a variety of file formats of diverse intraoral scanners is assured.

Data are transferred into the SilaCAD Software, trimmed and marked down to a technically sensible format. Optimisation and simplification revision of the scan leads to a considerable reduction of milling time.

### SilaCAM Software

To realize the milling process of the profiCAD system in each milling equipment, a SilaCAM Software is respectively necessary. At the moment, SilaCAM Software packages are available for the following 5-axis milling equipments:

- SilaMill 5 / T5 Edition / R5 | HinriMill 5 / T5 Edition / R5

Additional approvals will be individually adapted for use in designated equipments.





## The profiCAD-Box

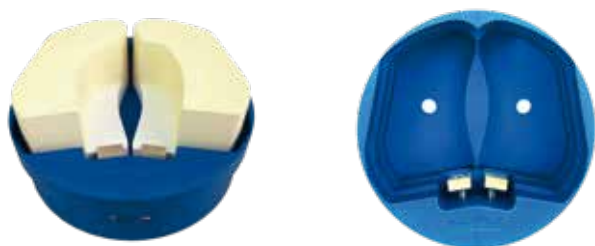
- 1 x Preform blank in U-form
- 1 x Preform model quadra left
- 1 x Preform model quadra right
- 1 x Preform model holder
- 1 x Preform model holder quadra
- 1 x Dongle with CAD-Software
- 1 x Dongle with CAM-Software



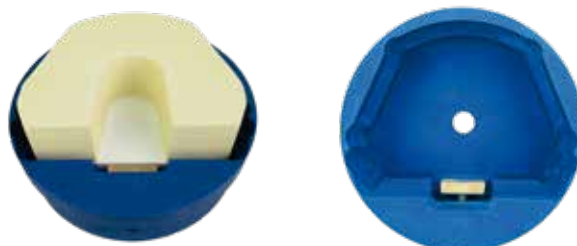
more information about the workflow and partners can be found at: <http://www.proficad-dental.de>

\* vhf 5-axis milling machines (except S2) with Dental-CAM 7 will not require any separate CAM software in the future

### Preform quadra model holder



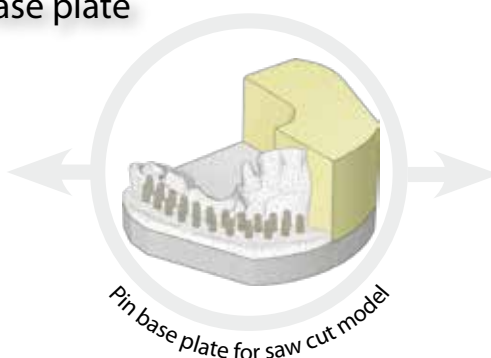
### Preform model holder



### Preform model quadra right & left on pin base plate



### Preform model on pin base plate



Pin base plate for saw cut model

# SILADENT

## SilaPart CAD CONSTRUCTION SOFTWARE

- Basic software
- telescopic-module
- texture recognition
- Auto Design

**perfect fitting & highest finish quality**

### SilaPart® CAD construction software

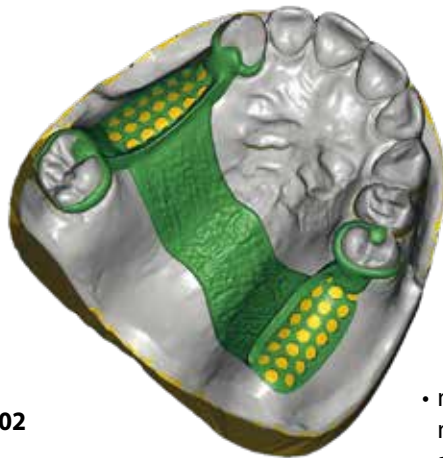
- flexible construction options
- creates open STL-File
- easy to learn
- highest precision
- includes VITA-dental data base
- no license fees
- no deformation in the framework
- digital system security
- less post processing due to best possible finish quality
- Expansion for combination technique and telescopic manufacturing is available

**REF 254002**

### SilaPart® CAD Auto Design\*

- automatic construction based on drawn contours on the model

**REF 254021**



### SilaPart® CAD telescopic-module\*

- flexible construction options
  - controllable friction
  - creates open STL-File
  - less post processing due to best possible finish quality

**REF 254010**

### SilaPart® CAD texture recognition\*

- model-cast structures and double-crown-module in a closed workflow
- adjustable friction with setting values
- offsets freely selectable
- preparation and design takeover through texture recognition

**REF 254020**

\* will work only in combination with the SilaPart® CAD basic software

#### Test the software.

A free trial of our SilaPart® CAD construction software can be downloaded here:  
[www.siladent.de/silapart-software](http://www.siladent.de/silapart-software)



# Milling machine SilaMill Z4

**Tomorrow's leading technology.  
Available today.**

Enjoy the freedom of choice.



**i** P. 38/39  
details



## The Z4: Groundbreaking

The digital workflow makes it happen: you and your patients can benefit from more pleasant treatments with first-class restorations in just one session. The Z4 is an investment that will pay off for you: high-quality restorations with maximum independence. The number of machinable block materials constantly increases as well as the number of scanners and CAD software packages that are validated with the Z4.

From the intraoral scanner to the milling machine, users work with a single interface and therefore only need to familiarize themselves with one software package. This is the convenience of completely integrated workflows!

## The new standard in quality

When it comes to wet machining blocks, the Z4 sets unprecedented quality standards. Fabricate glass-ceramic, PMMA, zirconia and composite restorations in mere minutes and finish highly accurate prefabricated titanium abutments.

## Efficiency that is second to none

No external compressed air supply necessary. Only requires clean water. The block is clamped in two seconds. With the Z4, you can work with unparalleled efficiency.

## Highest precision

- ✓ Milling and grinding in ultra HD
- ✓ Proven industrial quality
- ✓ 3 microns repetition accuracy

## Extremely economical

- ✓ Clear water – no additives necessary
- ✓ Mill screw-access channels, to save costs for “meso” blocks
- ✓ Automatic changer for 6 tools
- ✓ Self-opening working chamber door and drawer
- ✓ Easy to learn, easy to operate
- ✓ CAM software included/Tool starter set included

## Fastest production

- ✓ Restorations in under 10 minutes
- ✓ 2-second block insertion
- ✓ 100,000 RPM electrical high frequency spindle

## Complete independence

- ✓ 38 block materials from 20 manufacturers – and growing
- ✓ 800+ prefab titanium abutment blanks from 11 manufacturers
- ✓ Validated with all established scanners and design software
- ✓ Fully integrated workflow with TRIOS Design Studio (3Shape), DWOS chairside (Dental Wings) and exocad ChairsideCAD\*
- ✓ Integrated PC with touch screen and Wi-Fi – no laptop or tablet necessary
- ✓ Built-in compressed air – no compressor needed

\* Material and indication availability may vary by CAD provider. Full range of indications and materials available in STL workflow.

# Milling machine SilaMill N4 Edition



## Wet grinding reloaded. SilaMill N4 Edition

Eight liquid nozzles which are arranged at the spindle cool the whole tool evenly from the tip to the shank at all machining stages.

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details

4 axes	3 blocks	8 tools	only wet	grinding	PMMA	PEEK	Compo- sites	LiSi <sub>2</sub>	Titan	ZrO <sub>2</sub>
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### Ideal for the in-office lab

The SilaMill N4 Edition is ideal for in-office laboratories that want to produce the work without delay and avoid the higher costs associated with external production. With the combination of the wet grinding machine SilaMill N4 Edition and a dry milling machine, users can work simultaneously and minimize the cleaning effort that most hybrid machines would require (excluding of course vhf's R5 with its revolutionary DirectCleanTechnology).

### For a variety of indications

For crowns and bridges, inlays, onlays, abutments, telescopic crowns, veneers, table tops, etc.

### Tool change in no time

The tool magazine can be inserted quickly and effortlessly with a single movement. The automatic changer offers space for up to 8 tools.

### Exceptional precision

- ✓ Restorations in ultra HD
- ✓ Premium spindle with 4-fold hybrid ceramic ball bearings for maximum running smoothness
- ✓ 3 microns repetition accuracy

### Sophisticated design

- ✓ Eight fluid nozzles for even tool cooling
- ✓ Highest rotational speeds of up to 80,000 RPM with 800 watts of power
- ✓ Heavy industrial quality

### Absolute independence

- ✓ 38 block materials from 20 manufacturers – and rising
- ✓ 1,300+ titanium and CoCr prefabricated abutment blanks from 11 manufacturers
- ✓ Ideal for labs and in-office labs

### University validated results

- ✓ Researchers at University of Washington confirmed exceptional precision of – 10 µm and + 26 µm with milling of titanium custom abutments

### Maximum economy

- ✓ Work on up to 3 blocks with 45 mm length at the same time
- ✓ Automatic changer for 8 tools
- ✓ Webcam in working chamber for remote monitoring
- ✓ Ethernet interface for stable connection
- ✓ Removable coolant tank
- ✓ DentalCAM software with DirectMill function – included in scope of delivery and without license fees



# Milling machine SilaMill T5 / T5 Edition

## Dry milling with a plus. SilaMill T5 Edition

In addition to the three linear axes in x, y and z, two rotary axes ensure many and varied machining options.



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details

5 axes	1 blank	16 tools	dry	Milling	PMMA	PEEK	ZrO <sub>2</sub>	Compo- sites	CoCr	Gypsum
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**Proven quality now even better:** with the dental milling machine SilaMill T5 Edition, you will achieve perfect results. Process a wide range of materials and indications (blanks up to 40 mm) with five axes. Revolutionary technologies, such as tool-free blank clamping and an integrated ionizer, help you attain top-quality results.

### Unparalleled precision

- ✓ Restorations in ultra HD
- ✓ Premium spindle with 4-fold hybrid ceramic ball bearings for highest running accuracy
- ✓ 3 microns repetition accuracy

### Powerful and robust

- ✓ Mills the toughest materials on the market, incl. CoCr
- ✓ Powerful 500 watt spindle and 60,000 RPM
- ✓ Heavy industrial quality for maximum stiffness
- ✓ Solid cast body for the lowest vibrations

### Maximum independence

- ✓ Unlimited material accessibility in 98 mm disc format, separate block and prefab abutment holders available
- ✓ Covers the broadest range of indications, due to  $\pm 35^\circ$  rotation angle in the 5th axis, and up to 40 mm blanks

### Proven German reliability

- ✓ 100% engineered and manufactured in Germany
- ✓ Sophisticated sealing air concept to protect mechanics, electronics, and spindle
- ✓ Webcam for remote support
- ✓ Ethernet for stable long-range connection

### Extremely economical

- ✓ Ionizer and improved air circulation for easy machine cleaning
- ✓ DirectDiscTechnology for revolutionary disc clamping
- ✓ Automatic changer for 16 tools
- ✓ Easy to operate DentalCAM with DirectMill function included – no annual fees

### Special features of the SilaMill T5 Edition

- ✓ ionizer and improved air circulation for easy machine cleaning
- ✓ DirectDiscTechnology for revolutionary disc clamping (One-handed clamping)
- ✓ built-in webcam for remote support
- ✓ Ethernet connection for stable long-range connection

# Milling machine SilaMill 5.8 Edition



## Dusk-till-dawn milling and grinding.

8 Discs

24 Blocks

48 Prefab Abutments

16 Tools

3 Ionizers

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details

5 axes	8 blanks	16 tools	wet & dry	milling & grinding	PMMA	PEEK	ZrO <sub>2</sub>	Compo- sites	LiSi <sub>2</sub>	CoCr	Titan	Gypsum
-----------	-------------	-------------	--------------	-----------------------	------	------	------------------	-----------------	-------------------	------	-------	--------

The SilaMill 5.8 Edition is a highly versatile dental milling machine. It has five simultaneously operating axes, a blank changer for eight blanks and is designed for both dry and wet machining. With the optional wet grinding module, you can grind all common types of glass ceramic.

### Five simultaneously operating axes

The second rotary axis (B axis) with a tilt angle of up to  $\pm 30$  degrees enables the precise milling of undercuts.

### Non-stop machining

Thanks to the eightfold blank changer, you get performance that won't stop. The changer can be loaded with blanks via a small flap in the front and the correct blank for your milling job is then automatically inserted into the clamping device when needed. As a result, you can mill around the clock.

### Highest precision

- ✓ Restorations in ultra HD
- ✓ Premium spindle with precision bearing, a powerful 600 watts and 60,000 RPM
- ✓ 3 microns repetition accuracy

### Maximum variety

- ✓ Almost unlimited material accessibility in 98 mm disc format as well as 38 block materials and > 800 prefabricated titanium and CoCr abutment blanks

- ✓ Large indication diversity due to a  $\pm 30^\circ$  rotation angle in the 5th axis, and up to 30 mm blanks
- ✓ Optional wet-grinding module converts the S5 into a wet-processing machine

### Tremendous stability

- ✓ Processes all types of materials, including CoCr, titanium, and glass-ceramics
- ✓ Solid cast-body for minimum vibrations

### Outstanding reliability

- ✓ Day and night operation
- ✓ 100 % engineered and manufactured in Germany

### Maximum efficiency

- ✓ Milling and grinding around the clock due to automatic changer for 8 discs, 24 blocks or 48 prefabricated abutments
- ✓ Automatic changer for 16 tools
- ✓ 3 ionizers neutralize the static charge of acrylic chips – for a clean working chamber
- ✓ Very easy to operate via DentalCAM software with DirectMill function – included in scope of delivery and without license fees



# Milling machine SilaMill R5

## SilaMill R5. Redifing milling

10 Discs

60 Blocks

60 Prefab Abutments

blank changer for 10 blanks

Direct Technology



**i** P. 38/39  
details

5  
axes

10  
blanks

16  
tools

wet &  
dry

milling &  
grinding

PMMA

PEEK

ZrO<sub>2</sub>

Compo-  
sites

LiSi<sub>2</sub>

CoCr

Titan

Gypsum

With the new high-end R5 dental lab machine, SILADENT has developed a highly automated milling and grinding machine with a tenfold blank changer for both wet and dry machining, bringing revolutionary approaches to the lab. It combines utmost precision with maximum stability regardless of material – all with a minimal footprint.

Operating the machine is also incredibly simple thanks to various patent-pending technologies: With Direct Disc Technology, milling blanks can now be processed directly without any cumbersome fiddling with the tenter frames. The R5 can be used with a maximum variety of materials when it comes to discs, blocks and abutments and therefore provides perfect investment protection!

The ability to feed milling blanks up to 40 mm thickness via a blank changer and get right to work is another highlight. Even better is the generous tilt angle for the fifth axis of  $\pm 35$  degrees. The R5 thereby guarantees a maximum of indication variety and freedom of design.

### Maximum Precision

- ✓ Restorations in ultra HD
- ✓ Water-cooled high-precision spindle
- ✓ 3 microns repetition accuracy

### Powerful Robustness

- ✓ Mills and grinds the toughest materials on the market including all Ti and CoCr
- ✓ 800 watts of power and 80,000 RPM
- ✓ Heavy industrial quality

### Absolute Independence

- ✓ Sheer unlimited material accessibility in 98 mm disc format, 30 block materials, and > 140 titanium and CoCr prefab abutment platforms
- ✓ Covers the broadest range of indications, due to  $\pm 35^\circ$  rotation angle in the 5th axis, and up to 40 mm blanks

### Unmatched Reliability

- ✓ 100 percent engineered and manufactured in Germany
- ✓ Comprehensive sensor technology to monitor all vital system functions
- ✓ Two webcams for remote monitoring

### Highly Economical

- ✓ One of the fastest machines on the market
- ✓ Revolutionary material loading with Direct Disc Technology
- ✓ Automatic changer holds up to 10 discs, 60 blocks, or 60 prefab abutment blanks
- ✓ Direct Clean Technology enables wet and dry on the fly: ionizer, self-cleaning and built-in dryer

# Milling materials

## Keralloy® BioStar



Heights: 8, 10, 12, 13.5, 15, 18 and 20 mm

### Keralloy® BioStar

Keralloy® BioStar is a precious metal free, chromium cobaltbased milling alloy according DIN EN ISO 22674, type 4. Keralloy® BioStar does not contain any beryllium, indium or gallium.

Keralloy® BioStar is easy to mill and guarantees a high biocompatibility. With shoulder.

#### Indications:

- ✓ Crowns and bridges
- ✓ One-piece abutments
- ✓ Implant superstructures
- ✓ optimizes lasering

## CoCr BioStar



Heights: 8, 10, 12, 13.5, 15, 18, 20 and 24.5 mm

### CoCr BioStar

CoCr BioStar is a precious metal free, chromium cobalt-based alloy for the dental application used in dental milling machines (CAD-CAM). It does not contain any nickel, beryllium or gallium.

One of the remarkable features is the high corrosion resistance and biocompatibility. CoCr BioStar is suitable for soldering. Its low hardness allows CoCr BioStar to be easily milled. Available with or without shoulder.

#### Indications:

- ✓ Crowns and bridges
- ✓ One-piece abutments
- ✓ Implant superstructures
- ✓ optimizes lasering



Heights: 8, 10, 12, 13.5, 15, 18 and 20 mm

## TITAN BioStar 5°

Biocompatible pure titanium milling blank for porcelain fused to metal (PFM) techniques. Titan BioStar admits easy laser welding and can be fired using all usual porcelain indicated for titanium.

#### Indications:

- ✓ crowns both front and lateral
- ✓ bridge frames in frontal and lateral areas with up to three units
- ✓ Production of Abutments and bars

**NEW**

## Splint PMMA BioStar



Colour: transparent  
Heights: 15, 20 and 25 mm

## Splint Plus BioStar



Colour: transparent  
Heights: 15 and 20 mm

### Splint PMMA BioStar

Thermoplastic acrylic polymer based on polymethylmethacrylate (PMMA)

**Indications:** Splint PMMA BioStar are transparent dental milling blanks out of PMMA for the manufacture of splints, therapeutic splints, bite regulators and drilling templates for long-term application in the oral cavity up to 12 months.

#### Advantages:

- ✓ biocompatible – medical thermoplastic, no chemoplastic!
- ✓ industrially polymerized – minimal residual monomer content
- ✓ high fracture resistance and long-term stability (bruxism treatment)
- ✓ lowest water absorption – long-term stability of the fit
- ✓ good polishing properties, smooth surface are less susceptible to discoloration and plaque deposits, which at the same time minimizes the risk of inflammation.

### Splint Plus BioStar

A transparent, highly meshed poly carbonate milling disc.

**Indications:** on-bite splints, therapeutic splints, unbreakable provisional arrangements, drilling guides, positioners, snap on Smile, metal clasp-free partial prosthesis.

#### Advantages:

- ✓ very high break resistance
- ✓ high cost effectiveness
- ✓ can be milled extremely thin
- ✓ no special milling instruments necessary
- ✓ very good adhesion with other synthetic materials
- ✓ easy polymerisation of set teeth
- ✓ expandable with common auto- and light polymerisates
- ✓ comfortable biting hardness – not too hard and not too soft

# Milling materials

## SilaPart BioStar



Heights: 16, 18, 20, 25 and 30 mm

A special milling disc for the production of perfect partial denture frameworks.

- ✓ suitable for all open milling systems
- ✓ flexible and brake resistant
- ✓ precise and fast milling
- ✓ burns out without any residues
- ✓ also suitable for milling crowns and bridges

Colour: grey

## Wax BioStar



Heights: 14, 16, 18 and 25 mm

A milling wax disc especially adjusted to the dental CAD/CAM technique. Thereby crowns and bridges can be virtually formed, milled and finally casted the conventional way. The wax is excellently machinable and burns without residue. This results in smooth casted surfaces. These optimized features of the wax give way to even very delicate forms excluding shrinkage or distortion of the milled object. The wax – stable in volume – permits absolutely exact margin finishings and fits. Up to 30 units can be milled out of one disc.

Colour: ivory

## Marmoplast<sup>®</sup> BioStar

A milling gypsum blank with an extraordinary edge stability, produced from resin reinforced super hard stone. The mechanical properties are matched to meet the requirements of milling parameters and guarantees smooth and splinter-free surfaces. Cause of the special formulation the Preform models do not show any dust during the milling process, only gypsum chippings.

Heights: 25 and 30 mm





## PMMA BioStar



Colour: transparent, blue, ivory  
Heights: 14, 18, 20, 25 and 30 mm

## Juvora medical PEEK



Colour: grey-brown (natural) & white  
Heights: 16, 18, 20, 22, 25 and 30 mm

Dental milling discs based on PMMA (polymethylmethacrylate) which burn out residue-free and are developed for the casting technique. PMMA BioStar burns out without residue.

PMMA BioStar is available in 3 different colours.

Highly biocompatible and high meshed, pure PEEK material based on polyether ether cetone.

- ✓ Ideal for nearly all fixed and removable restorations
- ✓ Usable in all open milling systems
- ✓ Dentinecoloured – aesthetic alternative to NEM
- ✓ no discoloration and shades of the gingiva
- ✓ Veneer bonding with conventional composite materials
- ✓ ideal for allergy patients

## YuDent™ Dental PEEK

A high-performance polymer made of PEEK (based on polyether ether cetone) for the production of metal-free restorations for fixed and removable indications (e.g. implant-based applications, partial denture frameworks, etc.) for using in the milling technology.

- ✓ ideal for metal-free fixed and removable restorations and for implant supported works and model castings with clips.
- ✓ very light, also for large dentures, high wearing comfort
- ✓ tasteless, highly biocompatible
- ✓ high resistance to wear, abrasion and corrosion
- ✓ can be individualized with common composite materials, good adhesive bond
- ✓ colours: natural (grey-brown) and Oyster white, Ø 98.5 mm with shoulder



Heights: 16, 18, 20 and 25 mm

# Milling materials

## Zirkon BioStar



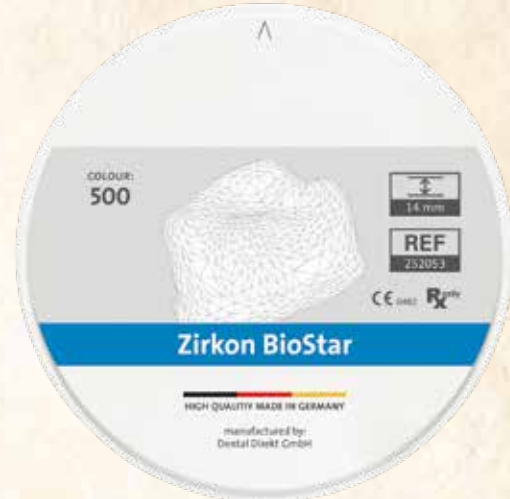
3Y-TZP-A

1.300  
MPa

35%  
Translucency

Heights: 10, 12, 14, 16, 18, 20, 22 and 25 mm

## Zirkon BioStar Colour



Heights: 14, 18, 20 and 25 mm

## Zirkon BioStar

Zirkon BioStar are dental blanks made of yttrium stabilized, pre-sintered zirconium dioxide for the production of crowns and bridges. Zirkon BioStar offers an absolutely homogenous structure through a specially developed production process. The blanks are optimized for rapid milling strategies and provide excellent edge stability and green body breaking strength during processing. The balanced composition and fine grain structure ensure excellent technical properties. Colour: white.

**Ø 98,5 mm with shoulder**

- ✓ highest flexural strength
- ✓ high aging resistance
- ✓ homogenous density
- ✓ excellent fitting
- ✓ very good colouring results

## Zirkon BioStar Colour

Already persistent coloured (monochrome) zirconium dioxide in the pre-sintered stage, manufactured according to the same production process as Zirkon BioStar. Available in 5 colors. Color: pre-colored.

**Ø 98,5 mm with shoulder**

- ✓ constant and homogenous colour quality.
- ✓ Saves a lot of time because there is no colouring and drying process anymore.
- ✓ Any post-processing will not result in any white areas.

**Colour orientation compared to the VITA-Colour code:**

500 => A1/A2	800 => A3/B3	
1000 => C2/C3	1333 => A3,5/B4	2000 => A4

**MADE IN GERMANY**



## Zirkon BioStar Ultra



4Y-TZP

>1.250  
MPa

45%  
Translucency

Heights: 14, 18, 20 and 25 mm

## Zirkon BioStar Ultra Multilayer



**NEW**  
more colors  
new quality

Heights: 14, 18 and 22 mm

## Zirkon BioStar Ultra

Zirkon BioStar Ultra is a highly translucent zirconia with best hydrothermal stability and increased fracture protection factor. Zirkon BioStar Ultra combines high translucency and highest strength for the production of highly esthetic full monolithic restorations and is very easy to colorize. Colour: white.

**Ø 98,5 mm with shoulder**

- ✓ highly translucent material
- ✓ precise colour gradient for a natural look
- ✓ high edge stability & hydrothermal resistance
- ✓ very good colouring results

## Zirkon BioStar Ultra Colour

Zirkon BioStar Ultra are monochrome pre-coloured and highly translucent milling blanks. The technical properties are identical to Zirkon BioStar Ultra in white, available in 8 colours (A1, A2, A3, A3.5, B2, B3, C2, D2).

## Zirkon BioStar Ultra Multilayer

Based on Zirkon BioStar Ultra, Zirkon BioStar Multilayer blanks offer a smooth shade gradation from cervical to incisal.

Zirkon BioStar Multilayer ingots are multilayer, pre-shaded and highly translucent blanks and offer a natural, flowing colour gradient in the enamel, dentin and cervical shade range. Approved for all dental constructions and bridges up to 14 units. Colour: multi-layer dyed.

**Ø 98,5 mm with shoulder**

Available in 16 shades (A1, A2, A3, A3.5, A4, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4), each in 3 heights (14 mm, 18 mm, 22 mm)

**MADE IN GERMANY**

# Milling materials

## Zirkon BioStar HT Smile (weiß / colour)



5Y-TZP	>750 MPa	49% Translucency
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## Zirkon BioStar HT Smile Multilayer



5Y-TZP	>800 MPa	16 VITA® shades	1 Bleach-Shade
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## Zirkon BioStar HT Smile

Zirkon BioStar HT Smile is a highly translucent, biocompatible zirconium oxide (type II, class 5) for maximum three-unit bridges in the anterior and posterior region with reduced flexural strength of > 750 MPa. Colour: white.

Ø 98,5 mm with shoulder

- ✓ translucent like lithium disilicate
- ✓ especially suitable for the anterior region
- ✓ for single crowns, inlays, onlays, veneers
- ✓ max. 3 unit bridges (fully anatomical or reduced)
- ✓ very good ageing resistance

## Zirkon BioStar HT Smile colour

Zirkon BioStar HT Smile Colour are monochrome pre-coloured and highly translucent milling blanks. The technical properties are identical with Zirkon BioStar HT Smile, white. Colour: pre-coloured.

Ø 98,5 mm with shoulder

Available in 8 colours (A1, A2, A3, A3.5, B2, B3, C2, D2) and 2 heights (14 mm and 18 mm).

## Zirkon BioStar HT Smile Multilayer

Zirkon BioStar HT Smile Multilayer is a multilayer pre-coloured, highly translucent zirconia and offers a natural, flowing colour gradient in the enamel, dentin and cervical shade range. The indication for up to 3-unit frameworks allows a wide range of applications.

Ø 98,5 mm with shoulder

- ✓ transparent like lithium disilicate
- ✓ > 800 MPa (lithium disilicate only > 300-380 MPa)
- ✓ for single crowns, inlays, onlays, veneers
- ✓ max. 3-unit bridges (fully anatomical or reduced)

Available in 16 shades (A1, A2, A3, A3.5, A4, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4), each in 3 heights (14 mm, 18 mm, 22 mm)

**MADE IN GERMANY**

## DD Basic Shade / DD Pro Shade Z



## DD Pro Shade C / DD Art Elements



**NEW in program!**

### DD Basic Shade

During the development, special attention was paid to the quick and easy reproduction of tooth shades. DD Basic Shade colouring liquids offer an ideal basis for individualising monolithic as well as veneering work. When an all-ceramic alternative to non-precious materials is desired, efficient fabrication in the laboratory is crucial. The DD Basic Shade shades can be used for all zirconia variants. The „one for all“ shade system that adapts to your daily laboratory routine and not the other way around.

### DD Pro Shade Z

The “Z variants” are optimized for the individual painting technique (stain & glaze), minimal coating (cut back) or as a framework shade for full veneering or the combination of the techniques in one job.

### DD Pro Shade C

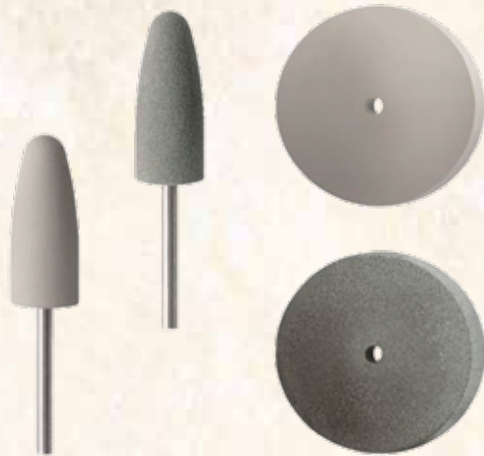
The “C variants” are optimized for the high level of translucency of Zirkon BioStar HT Smile. Monolithic full ceramic is possible with just glazing. A high aesthetic level and efficient work are combined into one.

### DD Art Elements

Universally applicable with all DD dentine liquids and with all Zirkon BioStar types.

MADE IN GERMANY

## Zirkon BioStar PrePolisher



Silicon-based polishing burs for milled zirconium structures **previous to sintering**.

The zirconium structures can be polished and trimmed easily due to its still soft condition. Margens can be smoothed and pontics shaped.

Zirkon BioStar Prepolishers are free of colour pigments which avoids unwanted staining. Due to their soft silicone bonding, they are especially adequate for the also soft consistency of the structures and adapt perfectly to the objects.

### Applications:

dark grey = 1. grade: Cutting, stripping and shaping  
light grey = 2. grade: High gloss polish

### Shape:

wheel, disc

## Zirkon BioStar Polisher



Diamond-based polishing system for burnishing **sintered** zirconium and alumina.

The chosen diamond grade allows for a gentle treatment of the frames with minimal heat development, resulting in excellent polishing effects.

### Applications:

blueish grey = coarse: Cutting, stripping and shaping  
blue = medium: Burnishing  
grey = fine: High gloss polish

### Shape:

lense, flame, wheel, roll



# Scan-Spray, Wax & Varnish

## MarmoScan Spray Basic



400 ml can

## MarmoScan Spray Plus



200 ml can

Scan-Spray, white

- ✓ suitable for all CAD-CAM systems
- ✓ homogeneous spray condition with very smooth surfaces
- ✓ very good price-performance ratio
- ✓ for the extraoral application (gypsum model)
- ✓ easy to clean with water steam

Scan-Spray, white

- ✓ extra-fine atomiser for ultra fine spray film, ensures finest edge presentation
- ✓ homogeneous spray condition with very smooth surfaces
- ✓ easy to clean with water steam
- ✓ suitable for all CAD-CAM systems
- ✓ for the extraoral application (gypsum model)

## MarmoScan Wax

Scannable modelling wax, Colours: ivory

Applications:

- ✓ Used in blocking out cavities and closing saw cuts prior to scanning
- ✓ For all CAD-CAM systems (white light and laser scan)
- ✓ Compatible with CAM-Stone N, as no additional spray/powder is needed when using MarmoScan Wax
- ✓ For optimum scan and fit



## MarmoScan Varnish

Scannable non-reflecting varnish for all dental gypsum

colour: ivory

20 ml bottle with brush



# Milling tools

## The suitable tools for your milling materials



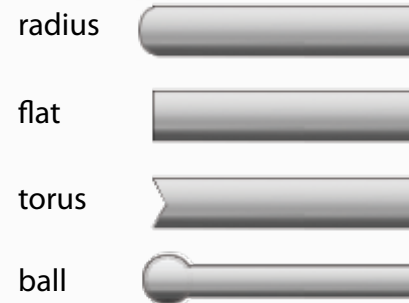
## The right tools, suitable for your milling machine with selected material.

It doesn't matter if you use a 4- or 5-axes milling machine.

Depending on the purpose, we offer different lengths and geometries.

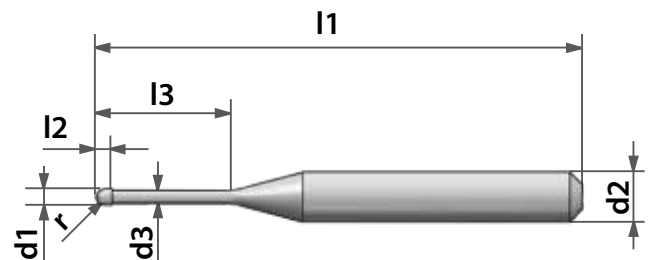
You can get further information about that topic in our online shop or directly from our technicians.

### cutting geometries



**i** P. 42/43  
details

## Tools for high loads and significant longer life.



L1 = total length  
L2 = cutting length  
L3 = free grinding length  
r = radius  
d1 = cutting diameter  
d2 = shaft diameter  
d3 = free grinding diameter





## SILENT powerCAM EC



### SILENT powerCAM EC - extraction unit for CAM systems

Powerful extraction unit with EC motor, bag-free, fine filter technology, suitable for frequently used CAM systems.

#### Advantages

- ✓ Reliable production process thanks to a low-maintenance EC motor with 5,000 guaranteed operating hours.
- ✓ Suitable for CAD-CAM systems requiring high suction performance due to a powerful motor with a max. flow rate of 4000l/min.
- ✓ High operating comfort thanks to bidirectional communication with the CAM system via PLC control.

#### Details

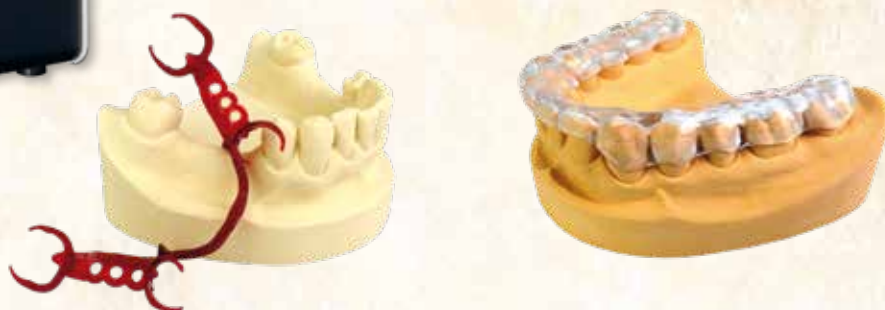
- ✓ No dust bag change due to bag-free fine filter technology, including automatic filter cleaning.
- ✓ Safe disposal of fine milling dusts with the aid of a disposal bag.
- ✓ Very low operating noise of 54.3 dB(A).

# 3D printer SilaPrint 125 ULTRA



## The perfect 3d printer for the laboratory

The open resourced DLP printer SilaPrint 125 ULTRA is the perfect choice for the production of 3D printed crown and bridges, working models, splints and drilling templates and allows a fast and economical production of high accurate framework.



### ✓ large construction area

The construction area offers with 125 x 70 x 120 mm enough building space. It's possible to print at the same time 3 splints (horizontal) or 10 splints (vertical) at once.

### ✓ 5 - 200 µm layer thickness

There are no limits to precision. The layer thickness is individually adjustable. We recommend a layer thickness of 50 µm.

### ✓ SLC programme

A SLC programme is inclusive. The software is easy to install and operate. Individual SLC formats can be used.

### ✓ Deformation optimization

The SilaPrint 125 includes a special swinging and solution system. Pulling forces during the printing process get minimized to avoid any deformations.

### ✓ Open system

The SilaPrint 125 ULTRA is an open system and can be used with external software and materials. The most common SLC format can be converted into a readable format quickly and easily by using the supplied Utility.

### ✓ Printing rate

The printing rate depends on the layer thickness and material. For example you can print 3 splints per hour.

#### SilaPrint 125 ULTRA

construction area	125 x 70 x 120 mm
Z-Axis variable	5 - 200 µm
XY Resolution	65 µm
Wavelength (LED)	385

#### Operation Environment

Temperature	10°C to 30°C
Humidity	40% to 60%

#### System properties

Operation System	Windows 7, 8 and 10
Network Browser	Google Chrome
File Input	.SLC, .ZIP(PNG), .CWS, .WRK, .MII

#### Properties

Printer size	43 x 43 x 59 cm
Weight	37,5 kg
Interface	Network, USB, Power supply
Power Input	Printer 24V DC, 3.75A widt adapter: 100~240V AC, 2A, 50/60Hz
SLC-Programm	integrated



# 3D printer SilaPrint LCD



## LCD printer at a lower entry price

Double-linear Z-axis is for high-precision 3D models designed with an extremely smooth surface.



The SilaPrint LCD is a professional and versatile 3D printer which, with the help of LCD technology and a double-linear Z-axis, enables detailed, dimensionally accurate models and at the same time, due to its lower entry price, is economical for printing even fewer models.

- ✓ high resolution
- ✓ exact dimensional accuracy
- ✓ perfectly matched to the SilaPrint resins
- ✓ intuitive control & usability

### ✓ Functions

Special functions such as an air cleaning system (activated carbon filter), a comfortable 7-inch touchscreen control and easy printing via W-LAN & Ethernet.

### ✓ Control & Ease of use

With the tilting 7-inch touchscreen monitor users can easily control print settings and print status at any time using the integrated control panel.

### ✓ Dental 3D software

A special software was specifically designed for the special Dental manufacturing requirements developed.

### SilaPrint LCD

Installation space	120 x 68 x 150 mm
Z Resolution	10 µm
XY Resolution	47 µm
Light source	LCD
File input	STL, OBJ
Transfer options	USB / W-LAN / Ethernet
Printing speed	up to 36 mm / h
Double linear Z axis	The double-linear Z-axis is for high-precision 3D models designed with an extremely smooth surface.
Secure printing	The air cleaning system includes an additional fan with an integrated activated carbon filter to ensure the finest particles and unpleasant fumes for a healthier printing environment.

## 3D printer SilaPrint Profession 250



# PRINTING IN A GRANDE SCALE

## SilaPrint Profession 250

### Large numbers are no problem for him

Are you very active in the digital workflow and need more construction space for larger quantities? Then SilaPrint Profession 250 is just right for you.

Economy and productivity can hardly be better combined with this DLP printer. The system-open process allows the production of larger number of pieces with a construction area of 250 x 140 x 190 mm and a 4K resolution with 3840 x 2160 pixels numbers in all dental application areas. The device's Digi-Optical technology ensures faster printing speeds.

- ✓ Dimensions: 820 x 2000 x 790 mm (W x H x D)
- ✓ Build area: 250 x 140 x 190 mm
- ✓ XY resolution: 65 µm
- ✓ Typ: 4k Ultra HD
- ✓ Weight: 305 kg



## SilaPrint Wash



## Otoflash G171



## SilaPrint Washstation

### Simple and clean

The used liquid can be emptied very easily by removing the inner tank. The airtight lid prevents unpleasant odors from escaping and thus improves the working environment.

### Height-adjustable drainer

Thanks to the integrated height-adjustable drip device, the operator can remove the components to be cleaned easily and cleanly.

### A program for every object

There are 3 washing programs available, which can be selected from the menu: Standard and intensive cleaning or the wash cycle for sensitive parts. You can clean very complex objects precisely. Gentle cleaning is suitable for sensitive parts in order not to damage the 3D prints.

- ✓ Dimensions: 320 x 240 x 330 mm (W x H x D)
- ✓ Inner space: 145 x 145 x 105 mm (W x H x D)

## Flash-curing device for light-curing resins

The device can be used for the photo-polymerisation of all light-curable materials (where the curing takes place) at a wavelength range of 280-580 nm. Ideal for end curing of 3D printed dental resins. With its technical configuration, the Otoflash G171 enables short curing times. Compared to other methods this achieves a substantially better curing of the 3D printed materials, resulting in very good physical characteristics and reduced residual monomer content (inhibition layer).

In combination with our Otoflash G171 and our printing material Ortho Print UV (medical class IIa) you can produce certified occlusal splints and drilling templates.

- ✓ Dimensions of polymerisation chambers: 120 x 120 x 50 mm
- ✓ Trays for polymerization material with UVB blocker
- ✓ Power input: 250 W
- ✓ Number of light sources: 2 flashbulbs à 100 W
- ✓ Flash frequency: 10 flashes per second
- ✓ deliverable with a protective gas appliance for nitrogen (N2)
- ✓ Digital timer: adjustable from 1 to 9.999 flashes
- ✓ Dimensions: 310 x 310 x 140 mm, weight: 6 kg

# SilaPrint light-curing resins



## SilaPrint light-curing resins

SilaPrint	application	colour	Medical device class	features	385 nm	405 nm
setup	orthodontic set-up models	maize yellow	✗	characterised by its increased building speed. The set-up models are very well suitable for the thermoforming technique.	✓	✓
model II	dental models for orthodontics and prothetics	beige-opaque	✗	Faster printing process due to higher output, still with the same precision	✓	✗
cast	dental casting technique	red-transparent	✗	highly compatible: it can be used with all commercially available embedding materials	✓	✓
gingiva	dental gingiva masks	gingiva	✗	permanently soft and flexible Perfectly combinable with working models made of SilaPrint model resins	✓	✗
model LCD	dental models for orthodontics and prothetics	beige-opaque	✗	schnellerer Druckprozess durch höhere Leistung mit gewohnter Detailpräzision	✓	✓
guide	dental drill guides	transparent	I biocompatible	dimensionally stable and biocompatible	✓	✓
tray	dental impression trays	green	I biocompatible	homogeneous surface, which significantly reduces manual reworking	✓	✓



# Detax light-curing resins



## FREEPRINT® light-curing resins

FREEPRINT	application	colour	Medical device class	features	385 nm	405 nm
model	printing of dental models	sand grey ivory	✗	Precise reproduction of details, maximum surface hardness and shape stability. Maximum precision in construction, feel and stability meet the high demands of model production	✓	✗
gingiva	flexible gingival masks for dental models	gingiva	✗	Excellent elasticity and tear-resistance. Excellent dimensional stability, no shrinkage or aging, ductile even when stored over a long period	✓	✗
tray	individual impression and functional trays and base resin plates	green	I biocompatible	Maximum construction speed, very high dimensional stability and torsional rigidity. No mechanical reprocessing of the surface necessary	✓	✓
denture	removable denture bases	pink-transparent	IIa biocompatible	Displays maximum mechanical flexural and tensile strength without becoming brittle. Colour stability, odorless and tasteless	✓	✗
temp	temporary crowns & bridges	A1, A2, A3	IIa biocompatible	Natural tooth esthetics, brilliant, translucent colours. Easy surface processing and polishing, can be characterized individually with the smartrepair® system or composites	✓	✗
ortho	base parts for orthodontic apparatuses, drilling and X-ray templates, occlusal and fixation splints	clear-transparent	IIa biocompatible	maximum reliability of construction process, mechanical strength, easy to polish. Breaking strength, elasticity and influence of moisture following the orthodontic standard. Validated processes for sterilization in autoclaves	✓	✓

# Sintering furnaces

## TABEO



TABEO-1/M/ZIRKON-100  
TABEO-2/M/ZIRKON-120  
TABEO-1/S/ZIRKON-100  
TABEO-2/S/ZIRKON-120

## HTS



HTS-2/M/Zirkon-120

The new generation of the model series TABEO / ZIRKON has been designed in close cooperation with dental laboratories and dealers of our worldwide distribution network. The result is a device concept which fully complies with most varied requirements not only in terms of economic efficiency and reliability, but especially with regard to characteristics of modern materials.

The SiC versions are equipped with 4 high-quality heating elements made of silicon carbide, allowing a sintering temperature of up to 1550°C and preventing discoloration of the restorations caused by molybdenum. Pre-set service programs increase the life span of the heating elements and the heating chamber in addition.

The MoSi<sub>2</sub> versions are equipped with 4 high-quality molybdenum-disilicide heating elements of the latest generation allowing a sintering temperature of up to 1650°C. The regular execution of pre-set service programs can prevent possible discoloration of restorations and increase the life span of the heating elements and the heating chamber.

The redesigned HTS-2 model series combines the well-known features of the models HT-S and HT-S SPEED.

The HTS-2 offers you not only the fusion of the properties of old models, but also a larger sintering capacity of up to 80 individual crowns. The heating system with four high-performance molybdenum disilicide heating elements (MoSi<sub>2</sub>) means that you can now choose whether to use the conventional long-term sintering or the SPEED-sintering with a heat-up rate up to 99°C/minute.

The simple, practical handling of the HT-series program control was also incorporated here with all its familiar functions; program display on a four-line LCD-display, timer function for sintering overnight or also using drying programs for wet-milled restorations. There are three service programs for servicing the heating chamber and the heating system.

## HT



HT-2/M/ZIRKON-120

## METAL



TABEO-2/M/METAL-120  
HTS-1/M/METAL-100  
HTS-2/M/METAL-120

### HT-2 - even more efficient due to a larger capacity

Due to the size of the heating chamber, it is now possible to process three sintering trays Ø= 120mm during the conventional long-term sintering. However, the heating system with six high-quality molybdenum disilicide heating elements (MoSi<sub>2</sub>) enable you to carry out processes within 76 minutes in a SPEED-sintering process. These represent optimal prerequisites for your dental laboratory or milling centre.

As with all our model variants, the HT-2 is operated with a simple, self-explanatory program control. 4-line LCD-display, timer function for overnight sintering, drying programs for wet-milled restorations. There are three service programs for servicing the heating chamber and the heating system.

### Safe and fit for the future

There are three models available to select from for sintering non-precious metal (NEM). All of these models work under inert gas atmosphere to protect the non-precious metal from scaling.

Choose from two long-lasting non-precious metal sintering systems. For the metal system 100, the shielding-gas supply is system-controlled. In addition to some pre-set material parameters, free programs are available. This guarantees safety. For the metal system 120, on the other hand, the shielding-gas supply can be adjusted manually. In addition to a high level of safety the customer can be sure to have the freedom to adapt the system to new kinds of metal material in the future.



**German high-tech when it comes to  
preheating and sintering furnaces!**

# Metal-ceramic alloy

**NEW**



## Dental metal-ceramic alloy

based on cobalt, powder, type 4

Grain: 10-30 µm / 15-45 µm

CE-Certified

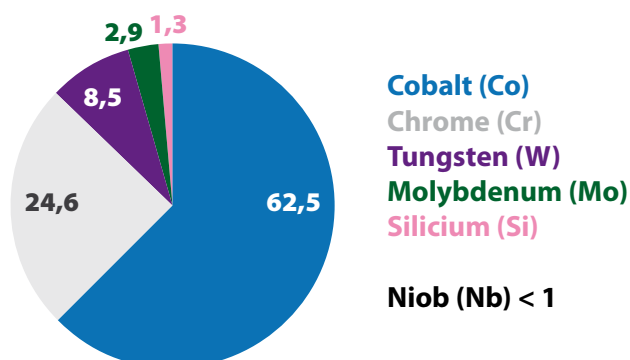
## Keralloy® Powder

Keralloy® Powder is intended for the production of dental restorations, implant prosthetics and orthodontic applications using the Selective Laser Melting (SLM) process.

### Advantages:

- ✓ biocompatibility
- ✓ Free of nickel, beryllium, cadmium and lead
- ✓ Easy to drill, mill and polish due to the low hardness
- ✓ Particularly good for primary situations
- ✓ CE certified

### Composition:



### Technicle Data

Colour	white
Density (g/cm <sup>3</sup> )	8,3
Vickers hardness (HV10)	285
WAK 25–500 °C (10 <sup>-6</sup> K <sup>-1</sup> )	13,9
WAK 20–600 °C (10 <sup>-6</sup> K <sup>-1</sup> )	14,0
Melting range (°C)	1.304–1.369
Casting temperature (°C)	ca. 1.470
Yield strength (R <sub>p0,2</sub> MPa / N/mm <sup>2</sup> )	490
Modulus of elasticity E	210
Tensile elongation at break A5 (%)	10

# Overview Scanner



	scanBox	Vinyl Open Air	Vinyl	Vinyl High Resolution
Measurement field (X×Y×Z)	80 x 60 x 85 mm	80 x 60 x 85 mm	80 x 60 x 85 mm	80 x 60 x 85 mm
Camera pixel	1,3 MP	1,3 MP	1,3 MP	2,8 (1,4) MP
Accuracy	6 µm (according to ISO 12836)			4 µm (according to ISO 12836)
Sensor technology	Stripe light triangulation with White-Light LED	Stripe light triangulation with White-Light LED	Stripe light triangulation with White-Light LED	Stripe light triangulation with Blue-Light LED
Dimensions (B × H x T)	360 × 310 × 390 mm	455 × 430 × 420 mm		
Weight	11 kg	23 kg		
Power supply	100 – 240 V AC 50/60 Hz			
Connections	2× USB 1× IEC connector	1× USB 1× IEC connector		
Software features				
HR and LR mode	✖	✖	✖	✔
Virtual articulator	✖	✔	✔	✔
Triple Tray® impression scan	🔑	🔑	✔	✔
secondDie	✔	✔	✔	✔
multiDie	🔑	🔑	✔	✔
multiCase	🔑	🔑	✔	✔
Monochrome texture-scan	✔	✔	✔	✔
Color texture scan	✖	✔	✔	✔
Universal mode	✔	✔	✔	✔
Measurement time				
Complete jaw				
Scanning	19 sec	16 sec	16 sec	18 sec
Matching	16 sec	13 sec	13 sec	17 sec
Total	35 sec	29 sec	29 sec	35 sec
Single tooth				
Scanning	32 sec	33 sec	33 sec	35 sec
Matching	12 sec	8 sec	8 sec	14 sec
Total	44 sec	41 sec	41 sec	49 sec
3-unit bridge				
Scanning	48 sec	45 sec	45 sec	50 sec
Matching	25 sec	22 sec	22 sec	25 sec
Total	73 sec	67 sec	67 sec	75 sec



# Overview milling machines



	SilaMill N4 Edition	SilaMill Z4	SilaMill T5 / T5 edition	
<b>Fields of application</b>	wet machining	wet machining	dry machining	
<b>Materials</b>	<ul style="list-style-type: none"> <li>✓ Glass ceramic</li> <li>✓ Composites</li> <li>✓ Titanium</li> <li>✓ Zirconium oxide in block form</li> </ul>	<ul style="list-style-type: none"> <li>✓ Glas ceramic</li> <li>✓ Composites</li> <li>✓ Titanium</li> <li>✓ Zirconium oxide in block form</li> </ul>	<ul style="list-style-type: none"> <li>✓ Resin / PEEK</li> <li>✓ Wax</li> <li>✓ Zirconium oxide</li> <li>✓ Composites</li> <li>✓ CoCr</li> <li>✓ Gypsum</li> </ul>	
<b>Indications</b>	<ul style="list-style-type: none"> <li>✓ Crowns</li> <li>✓ Bridge frameworks</li> <li>✓ Inlays</li> <li>✓ Onlays</li> <li>✓ fully anatomical crowns and bridge frameworks</li> <li>✓ Abutments</li> <li>✓ Telescope crowns</li> <li>✓ Veneers</li> <li>✓ Table-Tops</li> </ul>	<ul style="list-style-type: none"> <li>✓ Crowns</li> <li>✓ Bridge frameworks</li> <li>✓ Inlays</li> <li>✓ Onlays</li> <li>✓ fully anatomical crowns and bridge frameworks</li> <li>✓ Abutments</li> <li>✓ Telescope crowns</li> <li>✓ Veneers</li> <li>✓ Table-Tops</li> </ul>	<ul style="list-style-type: none"> <li>✓ Crowns</li> <li>✓ Bridge frameworks</li> <li>✓ Inlays</li> <li>✓ Onlays</li> <li>✓ fully anatomical crowns and bridge frameworks</li> <li>✓ Abutments</li> <li>✓ Telescope crowns</li> <li>✓ Model plates</li> <li>✓ Model casting</li> <li>✓ Occlusal covers</li> <li>✓ Model plug teeth</li> <li>✓ Implantbars</li> <li>✓ Veneers</li> <li>✓ Table-Tops</li> </ul>	
<b>no. of axes</b>	4	4	5	
<b>Rotation range of the axes</b>	A: + 190° up to - 10°	A: + 190° up to - 10°	A: ± 360° B: ± 35°	
<b>Spindle speed</b>	up to 60.000 U/min	up to 100.000 U/min	up to 60.000 U/min	
<b>Dimensions</b>	360 x 451 x 471 mm	471 x 522 x 507 mm	450 x 530 x 630 mm	
<b>Weight</b>	50 kg	66 kg	91 kg	
<b>Power supply</b>	100 – 240 V   50/60 Hz			
<b>Compressed air demand</b>	4 - 8 bar 35 l/min - 50 l/min	4 - 8 bar 35 l/min - 50 l/min	6 - 8 bar 40 l/min - 50 l/min	
<b>Warranty</b>	12 months			
<b>Flow rate suction</b>	x	x	2500 l/min	
<b>Room temperature</b>	18-25 °C   max. 32°C			
<b>Humidity</b>	max. 80%			

\* in combination with wet grinding option

# Overview milling machines



SilaMill 5.8 Edition	SilaMill R5	
wet & dry machining	wet & dry machining	<b>Fields of application</b>
<ul style="list-style-type: none"> <li>✓ Resin / PEEK</li> <li>✓ Wax</li> <li>✓ Zirconium oxide</li> <li>✓ Nano-Composites</li> <li>✓ Glass ceramic</li> <li>✓ CoCr</li> <li>✓ Titanium*</li> <li>✓ Gypsum</li> </ul>	<ul style="list-style-type: none"> <li>✓ Resin / PEEK</li> <li>✓ Wax</li> <li>✓ Zirconium oxide</li> <li>✓ Nano-Composites</li> <li>✓ Glass ceramic</li> <li>✓ CoCr</li> <li>✓ Titanium*</li> <li>✓ Gypsum</li> </ul>	<b>Materials</b>
<ul style="list-style-type: none"> <li>✓ Crowns</li> <li>✓ Bridge frameworks</li> <li>✓ Inlays</li> <li>✓ Onlays</li> <li>✓ fully anatomical crowns and bridge frameworks</li> <li>✓ Abutments</li> <li>✓ Telescope crowns</li> <li>✓ Model plates</li> <li>✓ Model casting</li> <li>✓ Occlusal covers</li> <li>✓ Model plug teeth</li> <li>✓ Implantbars</li> <li>✓ Veneers</li> <li>✓ Table-Tops</li> </ul>	<ul style="list-style-type: none"> <li>✓ Crowns</li> <li>✓ Bridge frameworks</li> <li>✓ Inlays</li> <li>✓ Onlays</li> <li>✓ fully anatomical crowns and bridge frameworks</li> <li>✓ Abutments</li> <li>✓ Telescope crowns</li> <li>✓ Model plates</li> <li>✓ Model casting</li> <li>✓ Occlusal covers</li> <li>✓ Model plug teeth</li> <li>✓ Implantbars</li> <li>✓ Veneers</li> <li>✓ Table-Tops</li> </ul>	<b>Indications</b>
5	5	<b>No. of axes</b>
A: ± 360° B: ± 30°	A: ± 360° B: ± 35°	<b>Rotation range of the axes</b>
up to 60.000 U/min	up to 80.000 U/min	<b>Spindle speed</b>
692 x 445 x 540 mm	580 x 695 x 600 mm	<b>Dimensions</b>
95 kg	145 kg	<b>Weight</b>
6 bar	6 - 8 bar	<b>Power supply</b>
mind. 80 l/min	100 l/min - 110 l/min	<b>Compressed air demand</b>
3000 l/min	3500 l/min	<b>Warranty</b>
		<b>Flow rate suction</b>
		<b>Room temperature</b>
		<b>Humidity</b>

# Overview sintering furnaces










	TABEO-1 S/ZIRKON-100	TABEO-1 M/ZIRKON-100	TABEO-2 S/ZIRKON-120	TABEO-2 M/ZIRKON-120	TABEO-2 M/METAL-120	
	Zirkon	Zirkon	Zirkon	Zirkon	Metal	
Heating-chamber height (mm)	42			92		
Sintering tray	1 x Ø 100 mm / 30 mm		3 x Ø 120 mm / 30 mm		1 x Ø 120 mm	
max. temperature	1550 °C	1650 °C	1550 °C	1650 °C	1400 °C	
Heating elements	4 x SiC	4 x MoSi	4 x SiC	4 x MoSi	4 x MoSi	
max. programmable heating rate (K/min)	25	25	25	25	40	
shortest heating periode to 1.500°C at 230V	63	61	58	72		
shortest cooling periode to 300°C	124	148	143	145		
Program control						
7-segment LED	✓	✓	✓	✓	✓	
4-lines LCD	✗	✗	✗	✗	✗	
Number of process steps	4	4	4	4	4	
Ffixed programs	✗	✗	✗	✗	4	
Program numbers free	9	9	9	9	5	
Thermocouple PtRh-Pt 140 mm, Typ S	✓	✓	✓	✓	✓	
Service programs						
A-Temperature control	✓	✓	✓	✓		
C-Purge heating chamber	✓	✓	✓	✓		
E-Regenerate heating elements	✗	✓	✗	✓		
Buffering of emergency-cooling battery						
Port RS 232	✓	✓	✓	✓	✓	
Door lift function	✗	✗	✗	✗	✗	
Shielding-gas supply	✗	✗	✗	✗	✓	
Over-night programming	✓	✓	✓	✓	✓	
Power max.	1700	1500	2000	1800	1600	
Voltage range	200-240 V   50/60 Hz   Socket separately fused (FI)					
Dimensions	400 x 400 x 600 mm		480 x 460 x 680 mm		530 x 460 x 680 mm	
Weight in kg	60	55	85	80	80	

# Overview sintering furnaces



	HTS-2 M/ZIRKON-120		HT-2 M/ZIRKON-120		HTS-1 M/METAL-100	HTS-2 M/METAL-120
	Zirkon		Zirkon		Metal	Metal
	72		102		57	67
	2 x Ø 120 mm / 30 mm		3 x Ø 120 mm / 30 mm		1 x Ø 100 mm	
	1650 °C				1400 °C	
	4 x MoSi		6 x MoSi		4 x MoSi	
	Classic 30	Speed 99	Classic 30	Speed 99	40	
	55	25	49	27		
	47	18	143	19		
	✖		✖		✖	✖
	✔		✔		✔	✔
	4		4		4	4
	✖		✖		4	4
	30		30		26	26
	✔		✔		✔	✔
	✔		✔			
	✔		✔			
	✔		✔			
	✖		✖		✖	✖
	✔		✔		✔	✔
	✔		✔		✔	✔
	✖		✖		✔	✔
	✔		✔		✔	✔
	3200		3800		2000	
	200-240 V   50/60 Hz   Socket separately fused (FI)					
	390 x 500 x 790 mm		500 x 560 x 820 mm		390 x 500 x 790 mm	
	60		74		56	

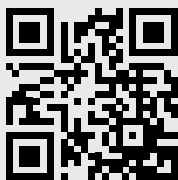
# Overview milling tools

Material	Colourcode	SilaMill	Type
Universal cutter		SilaMill 4 / N4	Double-toothed radius cutter
			Flat grinded double tooth cutter
		SilaMill 5 / 5.8 / T5 / R5	Double-toothed radius cutter with coating
			Flat grinded double tooth cutter with coating
Zirconium oxide with special coating		SilaMill 4 / N4 / Z4	Double-toothed radius cutter
		SilaMill 5 / 5.8 / T5 / R5	Triple-toothed radius cutter
Zirconium oxide with diamond coating		SilaMill 4 / N4 / Z4	Double-toothed radius cutter
			Double-toothed radius cutter
		SilaMill 5 / 5.8 / T5 / R5	Triple-toothed radius cutter
			Flat grinded double tooth cutter
Glass ceramic		SilaMill N4 / Z4 5 / 5.8 / R5	Double-toothed radius cutter
			Double-toothed radius cutter
			Triple-toothed radius cutter
			Flat grinded double tooth cutter
Non-precious alloys on CoCr basis & Titanium only with wet grinding option		SilaMill 4 / Z4	Double-toothed radius cutter
			Double-toothed radius cutter
		SilaMill N4 5 / 5.8 / T5 / R5	Double-toothed torus cutter
			Double-toothed radius cutter
Wax and Plastics		SilaMill 4 / N4 / Z4	Four-toothed torus cutter
			Double-toothed radius cutter
		SilaMill 5 / 5.8 / T5 / R5	Double-toothed radius cutter
			Double-toothed radius cutter
Nanocomposites with special coating		SilaMill 4 / N4 / Z4	Single-toothed radius cutter
			Double-toothed radius cutter
		SilaMill 5 / 5.8 / T5 / R5	Single-toothed radius cutter
			Double-toothed radius cutter



# Overview milling tools

	Ø Blade	Length Blade	Length	CAM-Code	REF
	0.3	0.6	35	U030-R2-35	249150
	0.5	1.5	35	U050-F2-35	249151
	0.6	1.2	35	U060-R2-35	249152
	1.2	5.0	35	U120-F2-35	249153
	0.3	0.6	40	U030-R2-40	249263
	0.5	1.5	40	U050-F2-40	249251
	0.6	1.2	40	U060-R2-40	249252
	1.2	5.0	40	U120-F2-40	249253
	1.0	2.0	35	Z100-R2-35	249141
	2.0	4.0	35	Z200-R3-35	249142
	1.0	2.0	40	Z100-R2-40	249231
	2.0	4.0	40	Z200-R3-40	249232
	0.6	1.2	35	Z060-R2D-35	249244
	1.0	2.0	35	Z100-R2D-35	249245
	2.0	4.0	35	Z200-R3D-35	249246
	1.2	5.0	35	Z120-F2D-35	249247
	0.6	1.2	40	Z060-R2D-40	249240
	1.0	2.0	40	Z100-R2D-40	249241
	2.0	4.0	40	Z200-R3D-40	249242
	1.2	5.0	40	Z120-F2D-40	249243
	2.4	18.0	40	Z240-R2D-40	249239
	0.6	5.5	35	G060-R-35	249262
	0.6	4.0	35	G060-T-35	249264
	1.0	8.0	35	G100-R-35	249260
	1.2	9.0	35	G120-T-35	249265
	2.4	16.0	35	G240-R-35	249266
	2.6	16.0	35	G260-T-35	249261
	0.6	1.2	32	M060-R2-32	249300
	1.0	3.0	32	M100-R2-32	249301
	1.2	3.0	32	M120-T2-32	249303
	2.0	4.0	32	M200-R2-32	249302
	2.0	4.0	32	M200-T4-32	249304
	0.6	1.2	35	M060-R2-35	249310
	1.0	3.0	35	M100-R2-35	249311
	1.2	3.0	35	M120-T2-35	249313
	2.0	4.0	35	M200-R2-35	249312
	2.0	4.0	35	M200-R4-35	249314
	1.0	4.0	35	P100-R1-35	249115
	1.0	2.0	35	P100-R2-35	249111
	2.0	8.0	35	P200-R1-35	249116
	2.0	4.0	35	P200-R2-35	249112
	2.5	5.0	35	P250-F1-35	249114
	1.0	4.0	40	P100-R1-40	249206
	1.0	2.0	40	P100-R2-40	249201
	2.0	8.0	40	P200-R1-40	249205
	2.0	4.0	40	P200-R2-40	249202
	2.4	18.0	40	P240-R2-40	249207
	2.5	5.0	40	P250-F1-40	249204
	1.0	2.0	35	C100-R2-35	249121
	2.0	2.0	35	C200-R2-35	249122
	1.0	4.0	35	C100-R1D-35	249124
	2.0	8.0	35	C200-R1D-35	249125
	1.0	2.0	40	C100-R2-40	249211
	2.0	4.0	40	C200-R2-40	249212
	1.0	4.0	40	C100-R1D-40	249214
	2.0	8.0	40	C200-R1D-40	249215



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