The dental CAD/CAM Milling System

From one user to another — with open interfaces!
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### Milling Machines and CAM Software

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R+K CAD/CAM Technologie unites the long-term practical experience of the Rübeling Group with up-to-date engineering know-how. The result is unique in the area of computer-aided dental prosthetics: The ORGANICAL System.

For almost ten years, a team of 25 experienced dental technicians, innovative machine builders and engineers has been working on trend-setting technologies and materials for the field of digital dentistry. At our headquarters in Berlin, we are developing modules which comply with the highest demands – our own.

You can rely on the standard of quality which probably can only be provided by a system developed by users for other users. Intuitive operation and comprehensive customer service is as important to us as outstanding material efficiency. This includes individual training courses for our customers and distributors and fast and uncomplicated assistance in case of technical problems. We are there for you at all times!

Thanks to its modular structure, ORGANICAL is a complete system which has the flexibility to adapt to your requirements. This means that we can offer highly efficient individual solutions and can still provide the complete process chain - with the sale and distribution of our components and our in-house milling services.

All materials in our Organical range and the Organical milling machines are made in Germany.
Development

Due to the close interaction between our manufacturing centre and our dental laboratory, as well as our close ties with the university clinics in Berlin, Halle/Saale, Tubingen and Munich, we are able to create new ideas that result in innovative products.

We are, at the same time, both user and producer. As such, we develop our machines and software with a special focus on the users’ requirements. You will notice this immediately when using, for example, an Organical milling machine, software tools in Organical Mill or Rhino Dental applications. With our innovative ideas for tools, auxiliary parts and materials, we are also supporting new developments with the 3Shape und 3DSystems.

Rübeling + Klar is continuously working on improving the standard of technology and simplifying procedures so that you can achieve optimum results much faster and easier.

Courses

In our easy-to-follow, hands-on courses, you will learn how to handle our machines and the corresponding software. This knowledge ensures that you achieve optimum results from the beginning.

We offer intensive courses for beginners and advanced users either in our own training rooms, on-site at your company, or online.

Upon request, we can also arrange special training courses to suit your needs. And we even offer courses relating to other topics other than dental restorations. Would you like to design jewellery using your Organical milling machine? We can show you how to do this!

In case you have any further questions during the course of your work, our telephone support team is there to help at any time.

Service & Support

If you experience any problems we will be there for you immediately. The experts in our manufacturing centre are there to assist you quickly and without delay in terms of service and support with any software problems you might have, either by phone or online using TeamViewer.

If the problem requires the support of one of our technicians on-site, we will be there for you as quickly as possible with the appropriate spare part - in Germany within 48 hours. This reduces your down-time to an absolute minimum.

Trust in Organical

- Modular CAD/CAM product portfolio, individually configurable for the perfect work flow.
- Outstanding time and material efficiency of the machines.
- Extensive, customized courses to suit your needs.
- Competent customer service.
Reliable, accurate, cost-effective – our milling machines working for you.

With our milling and rapid prototyping services, we cover the entire spectrum of the digital dentistry industry.

In principle, we are able to process all scan data. Our implant system library is being expanded continuously and contains almost all well-established providers.

You decide how you wish to submit your work to us. We process the work as required – classic models, raw scan data or data files that have already been modelled. We offer an unrivalled diversity of materials.

All work is constantly checked by our internal quality control management.

In addition to conventional materials, we also offer restorations from pre-fabricated blanks.

New in our range

pritid® crowns from pritidenta®

Three-dimensional layered crown blanks following nature’s example. Choose between anterior and posterior teeth in four different tooth sizes, three pre-fabricated tooth shapes and nine anatomic and aesthetically agreed tooth colours. When sending us the model we will process the pritid® crown blanks according to your requirements.

NanoZR from Panasonic

The new NanoZR is a zirconium oxide / aluminium oxide mixture fortified with nanocrystals – CER STABILIZED, whose physical properties are unique. It is much more resilient than comparable dental zirconium oxides. In addition, NanoZR is biocompatible and resistant to aging and guarantees an aesthetic veneer on account of its colouring. NanoZR is ideal for the crown and bridge technique as well as for telescopic, supra and tertiary constructions.

JUVORA™ Dental Disc – High-performance polymer made of 100% PEEK-OPTIMA LT1

Are you prepared for the new framework material? The Organic PEEK by JUVORA™ is ranked at the top in the dental industry. The denture material leads the market in relation to the technical progress that has been made with the construction of removable dental prosthetics. Organic PEEK by JUVORA™ comprises exclusively PEEK-OPTIMA LT1 from Invibio Ltd and is completely biocompatible. This high performance polymer has already been implemented in over four million implants worldwide.
Service Spectrum

New in our assortment:
- Lava™ Ultimate from 3M ESPE
- priti® crowns from pritidenta®
- NanoZR from Panasonic
- Organic PEEK by JUVORA™

Crows, bridges and telescopes
Trust in our highly accurate, milled frames that are made entirely out of well-established materials.

Implant-retained bridges and bar constructions
We guarantee an exact fit of bar profiles that can be freely selected. Ideal for all common implant systems.

Customized abutments
You will have optimal functioning and aesthetics with the highest manufacturing precision. Compatible with all common implant systems.

Impression and cast
We manufacture exact-fitting 3D impressions (models, model cast and drill templates).

IPS e.max® CAD crowns
We make high-quality reconstructions from IPS e.max® CAD.

Noritake Katana™ ML Zirkon

Milled models
After capturing the data in the mouth or from CT/DVT data, we create precise models without further delay. Special materials are used that are usually used for making models or that are used in dental technology.
Scanners and CAD Software
Organical Scan Oral

The mobile oral scanner with open data

The Organical Scan Oral is a light, handheld scanner weighing just 700 g with full recording technology which can be linked via a cable to a notebook and a power supply unit. With the intra-oral scanner, the dentures are captured digitally and a 3D model with hard and soft tissue is generated. The digital impressions provide the basis for the computer-supported construction and manufacture of implant- and tooth-retained restorations. Scan powder is not necessary, reduces, however, the scan time considerably.

Highlights
- Open system – output of STL data
- Direct, oral scans
- Short treatment time
- Storage of data free of charge
- No annual licence fee
- Portable (700g)
- No requirement for additional use of powder
- Real-time stitching
- Incl. laptop PC system

Technical Data
- **Open system** to all well-established dental CADs
- **Confocal microscope** with Moiré effect recognition
- **Smart pixel sensor** for fast and precise scanning
- **Real-time stitching**: Automatic merging of individual scans
- **Scanning without additional use of powder**
- **Pause/Stop**: Interruption of scans possible at any time
- **Typical scan speed (dependent on PC)**: 18 scans/sec.
- **Weight**: 700g
- **USB**: 2.0 PC connection
- **Output format**: STL file
- **Article No.**: 70-1820
Organical Desktop Scan/blue

The first all-inclusive scanner with satisfaction guarantee

Precise, fast and reliable scanning combined with personalised data capture and free data export in all common formats.

The Organical Desktop Scan is a space-saving, accurate and high-performing scanner that is simple and intuitive to use. You do not need an additional computer – with this scanner, everything is included!

It exports the data in an open format and thus, enables perfect integration with other CAD/CAM systems.

The special, geometric arrangement of the scan optics gives the Organical Desktop Scan its extraordinary precision. Individual stumps, whole rows of teeth and even impressions are captured perfectly.

NOW NEW!
Also with innovative blue light technology
- Even faster
- Even more precise

Less need for support and simple upkeep

Calibration of the optics and inspection of the system accuracy can also be carried out by inexperienced users. The construction was optimized by using mechanical industrial-grade components and an SPS-based electronic system. The LED projector saves electricity and is reliable.

Highlights
- High precision and repeatability (under 15 μm), tests carried out in measuring environment
- Configurable recording procedures, rows of teeth, multi-die stumps and in-place stumps, bridges, antagonists, wax-ups
- Compact design – the small dimensions facilitate installation and integration into any working environment
- Open system – the data can be exported in the most common, neutral formats (STL, PLY, ASC …) and can be read by every CAD/CAM system

Technical Data

- 3D-scan procedure: “Structured Light”-method
- Camera resolution: 1.3 Megapixels
- Light source: LED, 100 ANS/-Lumen-blue light (30,000 hrs)
- Motorized rotary disc: 2-axis movement (rotation, tilting)
- 3D scan area (W/H/D): 90/80/55 mm
- Dot distance: 0.04 mm
- Accuracy: 0.015 mm
- Format of output data: STL, PLY, OBJ
- Cutting point: USB 2.0 Hi-Speed, VGA/USB 3.0 Super-speed, VGA
- Dimensions (W/H/D): 250/450/450 mm
- Network: 100/1000 Mbps Gigabit LAN, W-LAN
- Weight: 13.5 kg
- Article No.: 70-1700
- Article No. (blue): 70-1702
Organical CAD

Complete Dental Solution

Organical CAD is an application for designing and modelling crowns, bridges, inlays, implants and wax-ups. With Organical scanners and Organical CAD, companies can profit from a complete hardware and software solution in one go which covers the whole work process: from 3D scanning to CAD modelling and planning. On account of the intuitive design and the plug and play system, even inexperienced users can quickly get started with their work without any delay.

With Organical CAD, you have additional flexibility as the data can be used via the import module of almost all scanners. The models that have been created are exported for milling and prototyping in the open STL format.

Organical CAD contains automated tools to help you achieve the best possible shapes and recommends optimal parameters for each step of the production process.

Highlights

- Recognition of boundary lines
- Optimal module recognition
- Removal of indentations and correction of the inner surface
- Finishing of boundary lines on the basis of the anatomic surface provided by the library
- Reduction of anatomic factors up to the limit of the thinnest material thickness
- Organical CAD contains tools for making changes and modelling shapes
- Adding/removing material, smoothing, freeshaping, scaling/turning/pivoting
- Effective modelling analysis tools
- Implants
- All-inclusive software (without additional modules) e.g., implants, bars integrated
- Small annual update fee

Article No.: 71-1700
Article No.: 71-1702 (blue)
We value 3Shape

For this reason, we value 3Shape

With its innovative scan solutions, 3Shape is one of the pioneers of dental 3D technology. We have accompanied 3Shape since the very beginning.

At our headquarters in Berlin, we still have the first scanner ever built by the Danish company.

Thus, being the first user of the dental 3Shape products, we have a special bonding. Our feedback as product user is very much valued and contributes to the new developments and constant improvements of scan solutions.

We are, therefore, not only distribution partner and user. We are proud to be able to contribute with our practical know-how to the further development of this technology. In addition, we value the incentives for our own product developments which stem from this teamwork.

From one user to another

You can profit twofold as we are sitting directly on the interface between development and practice.

As a partner of 3Shape, we are one of the first to learn about each new development. And as product user, we know exactly what your needs are as dental technician.

Our experience which grows every day, and our know-how in making CAD/CAM-milled dentures is therefore also fed into all our training courses and the support and service we offer.

We are both technology and distribution partner of 3Shape. Above all, however, we are there for YOU, our customers. Do you have any questions regarding one of the 3Shape products or do you need our help? We are your competent partner.

Freedom through openness

3Shape stands for an open system. We fully support this. We give you all the freedom to use and further process your scan data.

We are convinced by 3Shape and our own solutions. And we are certain that we can always offer you the best possible quality.

You can export Organical and 3Shape CAD/CAM data to all well-known systems and process them without any problem!

More about 3Shape:
www.3Shape.com
3Shape Dental Scanner

3Shape TRIOS® Color POD* – Powder-free colour scans in real time

The TRIOS® POD solution is an alternative to the cart version and offers more mobility and flexibility to dentists who have various work stations and for practices or clinics that have limited space.

The performance ability of the TRIOS® Ultrafast Optical Sectioning™ technology was further improved by the colours scans, increased speed, improved design of the scanner tip and the integrated anti-fog function in order to also optimize the patient’s perception. Practices/clinics can decide on one of the solutions – TRIOS® Standard or TRIOS® Color.

Highlights
- Effective, reduced length of treatment time
- Extra billable services
- Scan result to be agreed parallel with the laboratory
- True colour scans with many clinical advantages
- No spraying for optimal precision and patient comfort
- Now 40% quicker
- Up to 1000 3D pictures for true geometric shapes
- Autoclavable scanner tip with anti-fog heating

Indications
- Inlays, onlays, veneers, partial crowns
- Individual crowns, bridges up to 5 units
- Implants (individual abutments)
- Post and core restorations
- Orthodontics (purchase of additional module necessary)
- And others

*Further models upon request

Art.: 70-1533
3Shape D900*

The new D900 combines the Real Color™ technology with very high speed, implant/bar precision and an inner volume that is as large as possible within a small scanner casing.

With its new and unique Real Color™ technology and photo texture scan function, as well as its two 5 megapixel cameras, 3Shape is able to present the D900 series as the most advanced 3D scan technology on the market. It offers great scanning precision, especially with implants, and covers the complete spectrum of dental indications for full-service laboratories that only accept the best quality even with high levels of production.

- **High-resolution scans** of cast models, implant models and impressions
- **Dental System™ Premium** covers the whole palette of dental indications
- **Fast scan times**: single stump: 15 sec. (19 sec.), 3-piece bridge: 65 sec. (85 sec.)
- **4 cameras**: 5.0 megapixels
- **Ultra-high precision**: 15 μm
- **Single stump scanning** with the D900 – for high productivity with single or multiple processing
- **Real Color™ and photo texture scan technology** for high perception of detail and recognition of hand-drawn markings on the model
- **Auto Occlusion™ technology**: Scan of upper and lower jaw for automatic determination of occlusion
- **Optimised transfer of mandibular articulation**: Simplifies transfer of the model position from the physical articulator onto the virtual articulator
- **Article No.**: 70-1511

**Add-ons**

- Splint Design (module included)
- Model Builder
- Customized abutments
- Implant bridge and bars
- Model cast
- Full prosthesis (28 units)
- Planning the implant
- Surgical drilling template
- Orthodontics
- Appliance designer

*Further models upon request*
3Shape has developed a series of individual scan posts which accurately reproduce the captured core of the restoration position and the depth. The scan posts are just as ideal for intra-oral scanners in the clinic as they are for scanning cast models in the laboratory.

The dental post & core software supports the whole scan workflow which enables the clinical situation to be captured accurately. First of all, the patient or the cast model is scanned without the scan posts. Then a second scan is taken with the scan posts. A combination of both these scan procedures ensures that the surface and the depth of the alveole are captured perfectly.
Milling Machines and CAM Software
The systems that were available on the market in the fields of dentistry and machine building were not suitable as they did not meet our demands in terms of quality, size and energy consumption. As a result, our own dental technicians, machine builders and engineers developed the Organical milling machines. These have proved a success over the last 10 years, not only in Germany but also internationally in dental laboratories, milling centres and clinics. We design the Organical milling machines in-house and they are built by a mechanical engineering company in Berlin under licence.
### Organical Milling Machines

<table>
<thead>
<tr>
<th>Processable Products</th>
<th>Multi</th>
<th>5X</th>
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<tr>
<td>Abutment blanks</td>
<td>✔</td>
<td>✘</td>
</tr>
<tr>
<td>priti® crown</td>
<td>✔</td>
<td>✘</td>
</tr>
<tr>
<td>IPS e.max®-CAD</td>
<td>✔</td>
<td>✘</td>
</tr>
<tr>
<td>JUVORA™ Dental Disc</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Lava™ Ultimate</td>
<td>✔</td>
<td>✔</td>
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<table>
<thead>
<tr>
<th>Processable Materials</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass ceramic</td>
<td>✔</td>
<td>✘</td>
</tr>
<tr>
<td>Titanium / Titanium Niobium</td>
<td>✔</td>
<td>✘</td>
</tr>
<tr>
<td>CrCoMo</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Zirconium</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Acrylic</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Composite</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Wax</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Properties</th>
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<tbody>
<tr>
<td>Air cooling</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Dry</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Wet</td>
<td>✔</td>
<td>✘</td>
</tr>
<tr>
<td>Axes</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Pivoting range</td>
<td>360° (-30°+110°)</td>
<td>360°±30°</td>
</tr>
<tr>
<td>Tool storage capacity</td>
<td>47</td>
<td>22</td>
</tr>
<tr>
<td>Chucks pneumatic</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Chucks manual</td>
<td>✘</td>
<td>✘</td>
</tr>
<tr>
<td>Changers</td>
<td>20</td>
<td>✘</td>
</tr>
<tr>
<td>Article No.:</td>
<td>70-5000</td>
<td>70-1070</td>
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The new, fully automated Organical Multi manufacturing station is ideal for the processing of all millable materials. The processing of titanium and titanium alloys, together with glass ceramic polishing, completes what we have been able to offer up until now due to the possibility of wet machining.

On account of the larger swivel range from -30° to +110°, the manufacture of abutments with an increased degree of divergence is possible. The tool changer which is more than 50% larger provides you with a tool storage capacity of 47 instead of the previous capacity of 30, thus offering even more flexibility.

**Highlights**

- Mills all relevant materials
- Fully automated production with optional changer
- 60% less energy consumption as opposed to industrial machines
- Improved handling with wet machining as the door opens upwards
- Greater flexibility due to the enlargement of the tool storage capacity

**Technical Data Organical Multi**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (W/H/D):</td>
<td>96/196/78 cm (with door open): 96/240/78 cm</td>
</tr>
<tr>
<td>Weight:</td>
<td>750 kg</td>
</tr>
<tr>
<td>Spindel:</td>
<td>1 kW, 60,000 rpm</td>
</tr>
<tr>
<td>Feeder:</td>
<td>max. 15 m/Min.</td>
</tr>
<tr>
<td>Tool changer:</td>
<td>47-slot tool changer with tool length sensor and tool breakage detection</td>
</tr>
<tr>
<td>Rotary swivel axis: A:</td>
<td>-30°/+110° B: 360°</td>
</tr>
<tr>
<td>Power supply:</td>
<td>220 Volt / 16 A (slow)</td>
</tr>
<tr>
<td>Automation:</td>
<td>Optional: 20-slot changer</td>
</tr>
<tr>
<td>Article No.:</td>
<td>70-5000 (Organical Multi)</td>
</tr>
<tr>
<td></td>
<td>70-1024 (Organical Changer 20)</td>
</tr>
</tbody>
</table>
Processing of prefabricated blanks using the Organical Multi

The sturdy, steel framework, together with its weight of 700 kg ensures a stable and secure machine. Despite this, the Organical Multi and the Organical Changer 20, also offered as an option, fit through an EU standard-sized door.

The milling strategies developed and tested by us specifically for the dental technology field ensure safety and optimal precision in the manufacturing process. Together with the low-level of vibration and the quiet running, the swivel and rotary axis, amongst others, ensures the highest level of precision with high-strength milled aluminium (Certal).

The 1 kW spindle features a true running accuracy which is better than 2 μm and an integrated cooling and lubricating system. The polished recirculating ball screw guarantees a machine with a low noise-level and low maintenance. The blanks can be quickly and easily positioned in the holder (quick-action chuck) in a few simple steps.

With the Organical Changer 20 changer system, you can let the manufacturing station work independently round the clock. It can mill different types of jobs in succession. Crowns made of glass ceramic in various tooth colours, bridges made of titanium or more complex telescopic restorations. You just have to insert the correct blanks in the correct order. The rest will be taken care of for you by the work station!

OPTIONAL AND NEW:
Organical Changer 20
- Simple and efficient automated system for 19 blanks
- Various materials, material thicknesses and colours can be used
- Simple and convenient assembly and service of the changer due to the generous type of construction
- Easy to programme
- Fits through every EU standard-sized door
- Article No.: 70-1024

### Processable Materials

<table>
<thead>
<tr>
<th>Abutment</th>
<th>priti® crown</th>
<th>IPS e.maxCAD</th>
<th>Organic PEEK by JUVORA™</th>
<th>Lava™ Ultimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEM</td>
<td>Pure titanium</td>
<td>Titanium niobium</td>
<td>Zirconium</td>
<td>PMMA Wax Composite Glass ceramic</td>
</tr>
</tbody>
</table>
Organical 5X

The 5-axis milling machine with air-cooling is ideal for the processing of CoCrMo, zirconium, Composite and various synthetic materials. Due to its pivoting range of -/+30°, the manufacture of abutments with angular divergence is possible. The sturdy, steel framework of the machine, together with its weight of 800 kg ensures a stable machine. The blanks can be positioned quickly and easily in the holder (quick-action chuck) in a few simple steps.

**Technical Data Organical 5X**

- **Dimensions (W/H/D):** 119/188/83 cm
- **Weight:** 800 kg
- **Spindle:** 1 kW, 60,000 rpm.
- **Feeder:** max. 15 m/Min.
- **Rotary swivel axle:** B: -/+30° A: 360°
- **Power supply:** 220 Volt / 16 A (slow)
- **Article No.:** 70-1070

**The 5th axis – more freedom**

**Special features:**
- Automatic calibration
- Definitions of tool service life and replacement tools

1. A-Axis: Swivel range ±360°
2. B-Axis: Rotatable ±30°
3. Storage capacity for 22 tools

**Processable Materials**

- NEM
- Zirconium
- PMMA
- Wax
- Composite
- Organic PEEK by JUVORA™
- Lava™ Ultimate

Photo: 3M ESPE
OrganicalMill 2.0 is a CAM software for creating data for controlling the milling machine

With the help of this software, various restorations can be produced using all sorts of materials, such as zirconium.

The individual processes have been specifically adapted for dental technology procedures and as a result, the menu structure is user-friendly and suited to the dental technician.

**Setting options**

The user can programme various settings depending on material and restoration, e.g. shrinkage factor, shape of blank.

Optimal milling strategies can be selected for all types of restorations, such as bridges. These pre-programmed milling strategies are used daily at R+K CAD/CAM and ensure highest precision. After the object has been placed in the blank, it is secured. Supports can be used with all materials (retention).

It will only need a minimal amount of additional work due to the optimized milling strategy. The quiet running of the milling machine guarantees a long service life of the mechanical components and mills, as well as a perfect milling result.
Organical Desktop

Organical Desktop 8
Superclass compact

- Organical Multi inside
  German industry standard
- Extremely large swivel area
  Millable titanium abutments with pronounced angulations
- Best possible material efficiency
  Blanks with a distinctly larger diameter can be integrated
- Maximal flexibility
  Wet and dry processing guaranteed

Quality for beginners

Organical Desktop is the cost-efficient alternative for small dental laboratories. It is worth it even with a capacity utilisation of just 200 units per year! This way, you are not reliant on an external milling service.

The modules work extremely quietly and, thanks to its handy size, it can be integrated in three different sizes in every working environment – the small version even works without a compressed air connection. The CAM software is very easy to use and was specially adapted to suit the machines. The pre-programmed R+K CAD/CAM milling strategies ensure highest precision.

With the Organical Desktop, you receive an open, licence-free system. The CAM software can import all STL data sets (regardless of the CAD programme). Make your own high-quality dental restorations direct in your own company!
Superclass compact

5-axis milling machine for processing almost all well-established materials with wet and dry milling

Highlights

- Organical Multi inside – integration of practice-tried components from the Organical Multi series
- Improved surface quality – completely new-developed drive concept with an even more continuous and flexible feeder
- Experience the freedom – 5-axes and an extremely large swivel area from -/+30° even enable the production of abutments with complex angular divergences
- Automatic tool changer station – storage capacity for 19 milling tools (+ 1 zero tool) for measuring lengths and tool breakage monitoring
- Working intuitively – user-friendly concept and touch panel
- Improved material efficiency – blanks with larger diameter possible, manual blank change, special holders not necessary
- Discover new fields of business – full and splinted prostheses, customized impression trays and much more, digitally milled
- Just in case – remote maintenance possible
- Save the best for last – guaranteed wet and dry processing possible

Service

- 1 year bring-in guarantee on all components
- Extended guarantee upon request possible
- Basic instruction at R+K CAD/CAM in Berlin or with one of our regional partners

Optional Extras

- Water container with pump for wet milling, aspiration
- Container for IPS e.max CAD, Pritidenta, pre-milled blanks

Technical Data Organical Desktop 8

Dimensions (W/H/D): 760/610/556 mm

Weight: 140 kg

Spindle: 400 W, 60,000 rpm

Tool changer: Automatic tool changer (19-slot) with facility to measure lengths and tool breakage monitoring

Compressed air: 7 bar

Rotary axis: A 360°, B+/−30°

Article No.: 70-5100

Processable Materials

- Pure titanium
- Titanium niobium
- Zirconium
- Glass ceramic
- IPS e.max®-CAD
- Composite
- PMMA
- Wax
- Lava™ Ultimate
- Abutment
- Organic PEEK by JUVORA™

100% PEKK-OPTIMA®LT1
With automatic tool changer
4-axis milling machine with integrated clamping device

With the microstep operating system, the machine runs quietly and extremely accurately, fast processing due to the exponential acceleration ramps and automatic switch to full-step operation.

- 4-axis dry milling
- Compressed air 7 bar
- Integral clamping device for blanks with Ø 98.5 mm and with thicknesses of 10–26 mm
- Manuel spindle collet chuck for tools with 3 mm spindle diameter
- Automatic tool changer for 6 tools for determining length
- Great precision and excellent surfaces due to the quality spindle (Jäger)

CAM Software

- Easy to use, specially adapted for the dental industry
- Integrated control software for the easy export of CAM data sets
- Tool and material library for the dental industry

Service

- Service 1 year bring-in guarantee on all components
- Basic instruction at R+K CAD/CAM in Berlin or with one of our regional partners

Optional Extras

Cabinet 60/92.5/60 cm (W/H/D) offers a great deal of storage room for blanks, tools and accessories, solid granite top, high-quality design.

Switch panel for external vacuum system, switch panel for automatic switching on/off of external vacuum system, controllable via software, energy-saving function.

Technical Data Organical Desktop 3

Dimensions (W/H/D): 40/38.5/41 cm
Weight: Approx. 50 kg
Spindle: 240 W, 60,000 rpm
Tool changer: Automatic tool changer (6-slot) with length determination and tool breakage monitoring
Rotary axis: 360°
Article No.: 70-1082

Processable Materials

<table>
<thead>
<tr>
<th>Zirconium</th>
<th>PMMA</th>
<th>Wax</th>
<th>Composite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic PEEK by JUVORA™</td>
<td>Lava™ Ultimate</td>
<td>100% PEEK OPTIMA LT1</td>
<td></td>
</tr>
</tbody>
</table>
Organical Desktop 1

Works without compressed air

4-axis milling machine with integrated clamping device and manual tool changer

With the microstep operating system, the machine runs quietly and extremely accurately, fast processing with the exponential acceleration ramps and automatic switch to full-step operation.

- 4-axis dry milling
- Without compressed air
- Integral clamping device for blanks with ø 98.5 mm and with thicknesses of 10–26 mm
- Manual spindle collet chuck for tools with 3 mm diameter
- Manual tool changer with quick-action chuck
- Great precision and excellent surfaces due to the quality spindle (Jäger)

CAM Software

- Easy to use, specially adapted for the dental industry
- Integrated control software for the easy export of CAM data sets
- Tool and material library for the dental industry

Service

- Service 1 year bring-in guarantee on all components
- Basic instruction at R+K CAD/CAM in Berlin or with one of our regional partners

Optional Extras

Cabinet 60/92.5/60 cm (W/H/D) offers a great deal of storage room for blanks, tools and accessories, solid granite top, high-quality design

Switch panel for external vacuum system, switch panel for automatic switching on/off of external vacuum system, controllable via software, energy-saving function.

Technical Data Organical Desktop 1

- Dimensions (W/H/D): 40/38.5/41 cm
- Weight: Approx. 50 kg
- Spindle: 240 W, 60,000 rpm
- Tool changer: Manual tool changer with quick-action clamp, length determination, tool breakage monitoring
- Rotary axis: 360°
- Article No.: 70-1084

Processable Materials

- Zirconium
- PMMA
- Wax
- Composite
- Organic PEEK by JUVORA™
- Lava™ Ultimate
- 100% PEEK-OPTIMA LT1

Photo: 3M ESPE
System Components, Material and Accessories
Organical Heat L – 1800°C
Sintering furnace for Y-zirconium and dental ceramics
Connection: 230 Volt AC / 16 A
Dimensions (W/H/D): 73/81/60 cm
Weight: 90 kg
Stacking height: 100 mm
Support surface: 140 mm
Properties: 6 individual programmes
Article No.: 70-1200

Organical Heat M – 1650°C
Sintering furnace for oxide ceramics
Connection: 230 Volt AC / 16 A
Dimensions (W/H/D): 670/560/750 cm
Weight: 87 kg
Stacking height: 95 mm
Support surface: 120 mm
Properties: 6 individual programmes
Article No.: 70-1200

Organical Heat S – 1600°C
Sintering furnace for Y-zirconium and dental ceramics
Connection: 230 Volt AC / 10 A
Dimensions (W/H/D): 45/66/39 cm
Weight: 35 kg
Stacking height: 70 mm
Support surface: 100 mm
Properties: 6 individual programmes
Article No.: 70-1201

Organical-Exhaust L
High performance vacuum system for all large Organical milling machines
Connection: 230 Volt AC / 10 A
Dimensions (W/H/D): 38/72/56 cm
Weight: 35 kg
Air circulation: 480 m³/hour
Properties: Large vacuum system with fine particle filter, low noise level, narrow tower casing, extra large filter volume, easy filter maintenance from the front with filter basket module, fill-level indicator
Article No.: 70-1300

Organical-Exhaust S
Compact vacuum system for all Organical Desktop milling machines
Connection: 230 Volt AC / 10 A
Dimensions (W/H/D): 41/33/35 cm
Weight: 14 kg
Air circulation: 240 m³/hour
Properties: Small vacuum system with fine particle filter, space-saving, low noise level, speed freely adjustable, quick maintenance access
Article No.: 70-1087
Organical Blanks

**Organic NEM**

Height | Art. No. | Composition | Ø 98.5 mm
---|---|---|---
8.0 mm | 67-2108 | Co 61.1 % |
10.0 mm | 67-2100 | Cr 32.0 % |
12.0 mm | 67-2101 | Mo 2.5 % |
13.5 mm | 67-2102 | Si 0.7 % |
15.0 mm | 67-2103 | Mn 0.7 % |
18.0 mm | 67-2118 | |
20.0 mm | 67-2120 | |

**Organic Pure Titanium**

Height | Art. No. | Composition | Ø 98.8 mm
---|---|---|---
10.0 mm | 67-2010 | Ti 99.9 % |
12.0 mm | 67-2011 | |
13.5 mm | 67-2012 | |
15.0 mm | 67-2013 | |
18.0 mm | 67-2014 | |

**Organic Titanium Niobium**

Height | Art. No. | Composition | Ø 98.8 mm
---|---|---|---
10.0 mm | 67-2000/1 | Ti 86.9 % |
12.0 mm | 67-2001/1 | Nb 6.5 – 7.5 % |
15.0 mm | 67-2002/1 | Al 5.5 – 6.5 % |
18.0 mm | 67-2003/1 | Fe < 0.25 % |

**Organic Zirconium**

Translucent + opaque

Height | Art. No. | Composition | Ø 100 mm
---|---|---|---
10.0 mm | 67-1000 | ZrO0/HfO0/Y0: >99.0 wt% |
14.0 mm | 67-1001 | Y0: < 4 - 5.5 wt% |
18.0 mm | 67-1002 | HfO0: < 5.0 wt% |
22.0 mm | 67-1003 | Al0: < 0.1 wt% |
26.0 mm | 67-1004 | Andere Oxide: < 0.5 wt% |

Opaque

10.0 mm | 67-1100 | |
14.0 mm | 67-1101 | |
18.0 mm | 67-1102 | |
22.0 mm | 67-1103 | |
26.0 mm | 67-1104 | |

**Organic PMMA – colour**

A2, A3, B1

Height | Art. No. | Composition | Ø 98 mm
---|---|---|---
16.0 mm A2 | 67-3500 | | Highly cross-linked polymethylmethacrylate, methacrylate > 1% |
16.0 mm A3 | 67-3501 | |
16.0 mm B1 | 67-3502 | |
20.0 mm A2 | 67-3600 | |
20.0 mm A3 | 67-3601 | |
20.0 mm B1 | 67-3602 | |

**Organic Wax blue**

Height | Art. No. | Composition | Ø 98 mm
---|---|---|---
20.0 mm | 67-3315 | Synthetic wax |

**Organic PMMA – clear**

Height | Art. No. | Composition | Ø 98 mm
---|---|---|---
16.0 mm | 67-3703 | Polymethyl-methacrylate Polyaluminiumthylacrylate (Copolymerisate)* | Derivative of the barbituric acid, opaciying agent: Perylene and iron oxide pigments Methyl-methacrylate, cross-linking agent: Traces: quaternary ammonium salt, copper (I) salt, stabilizers, screening agent |
20.0 mm | 67-3603 | |

**Organic Wax green**

Height | Art. No. | Composition | Ø 98 mm
---|---|---|---
20.0 mm | 67-3316 | Wax acrylic mixture |

* *
Organical Accessories

**Blank holder (Multi + 5X)**

- Zirconium 10.0 mm, Art. No.: 68-1430
- Zirconium 14.0 mm, Art. No.: 68-1432
- Zirconium 18.0 mm, Art. No.: 68-1435
- Zirconium 22.0 mm, Art. No.: 68-1436
- Zirconium 26.0 mm, Art. No.: 68-1431
- Acrylic 16.0 mm poly, Art. No.: 68-1437
- Acrylic 18.0 mm poly, Art. No.: 68-1438
- Acrylic 20.0 mm poly, Art. No.: 68-1429
- Acrylic 25.0 mm poly, Art. No.: 68-6025
- Acrylic 30.0 mm poly, Art. No.: 68-6030

**Blank holder (Multi)**

For abutment blanks, priti® crowns and glass ceramic
Art. No.: 68-1476

**Burs zirconium + acrylic**

- **Burs zirconium**
  1. Burs 0.60 mm, Art. No.: 68-1005
  2. Burs 1.00 mm, Art. No.: 68-1003
  3. Burs 2.50 mm, Art. No.: 68-1004

- **Burs acrylic**
  4. Burs 0.60 mm, Art. No.: 68-1007
  5. Burs 1.00 mm, Art. No.: 68-1046
  6. Burs 2.00 mm, Art. No.: 68-1047
  7. Burs 3.00 mm, Art. No.: 68-1048

**Burs metal**

1. Burs CrCoMo [NEM] + titanium 0.6 mm, Art. No.: 68-1040
2. Burs CrCoMo [NEM] + titanium 1.0 mm, Art. No.: 68-1041
3. Burs CrCoMo [NEM] + titanium 2.0 mm, Art. No.: 68-1042
4. Burs CrCoMo [NEM] + titanium 2.0 mm, flat, Art. No.: 68-1050
5. Burs CrCoMo [NEM] + titanium 3.0 mm, Art. No.: 68-1043
6. Burs CrCoMo [NEM] + titanium 3.0 mm extra long, Art. No.: 68-1044
7. Burs CrCoMo [NEM] + titanium 1.0 mm flat, Art. No.: 68-1045

**IPS e.max® Finishing burs**

for the Organical Multi

1. Finishing bur for IPS e.max® 0.6 mm
   Art. No.: 68-1035
2. Finishing bur for IPS e.max® 1.0 mm
   Art. No.: 68-1036
3. Finishing bur for IPS e.max® 2.0 mm
   Art. No.: 68-1037
4. Finishing bur for IPS e.max® 3.0 mm
   Art. No.: 68-1038

**Burs implant metal**

1. Burs implant CrCo [NEM] + titanium 1.0 mm, Art. No.: 68-1015
2. Burs implant CrCo [NEM] + titanium 1.5 mm, Art. No.: 68-1016
3. Burs implant CrCo [NEM] + titanium 1.8 mm, Art. No.: 68-1017
Organical Accessories

Organical zirconium polishing paste

Handling
For pre-polishing and high-gloss polishing of ceramic and zirconium
Polishing paste zirconium
5g, Art. No.: 68-1251
30 g, Art. No.: 68-1250

Organical Anti-Glare Spray
Scan spray for dental CAD/CAM use

Organical 3D anti-glare spray prevents reflections on objects that are to be scanned
- Industry standard
- Proved successful in the dental industry
- Contents 400 ml

Organical anti-glare spray
Art. No.: 68-1800

Organical Scan Wax

Modelling wax with attractive handling properties and great opacity. Organical Scan Wax delivers optimal scan results without additional application of scan spray or powder. Is easily removed through evaporation.

Organical Scan Wax
Art. No.: 68-1813
Scan Bodies

Organical scan bodies for laboratory scanners

Scan bodies are used to reproduce the position of the abutment in the construction software

- Capture of exact position through optimized form
- Matching in AbutmentDesigner with a single click
- Best suited for scanning through non-reflective body made of PEEK
- Great and lasting precision guaranteed through interface made of titanium
- Captive fixing screws
- Colour coding for efficient work

Scan bodies for intra-oral scanners

Further systems in our range

**BOMET 3i**
- Certain 3.4, **Art.:** 63-1119
- Certain 4.0/5.0/6.0, **Art.:** 63-1120
- Certain External Hex 3.25, **Art.:** 63-1117
- Certain External Hex 4.0/5.0/6.0, **Art.:** 63-1118

**Nobel Biocare**
- Active 3.5 NP, **Art.:** 63-1109
- Active 4.3/5.0 RP, **Art.:** 63-1110
- Replace 3.5 NP, **Art.:** 63-1101
- Replace 4.3 RP, **Art.:** 63-1102
- Replace 5.0 WP, **Art.:** 63-1103
- Replace 6.0 WP, **Art.:** 63-1104
- Multitunit, **Art.:** 63-1130

**Zimmer**
- BoneLevel 3.3 NC, **Art.:** 63-1105
- BoneLevel 4.1/4.8 RC, **Art.:** 63-1106

**Astratech Dental**
- Osseospeed 3.0 S, **Art.:** 63-1113
- Osseospeed 3.5/4.0, **Art.:** 63-1114
- Osseospeed 4.5/5.0, **Art.:** 63-1115

Further implant systems upon request.

Scan Bodies made of acrylic

The old and trusted cheaper scan bodies from SAE-Dental can be found in the current catalogue or on the website – www.sae-dental.de

- BioHorizons for spacer sleeves and Ankylos base abutment Balance C narrow

Further systems in our range

**Ankylos**

**Bego Semados**

**BioHorizons**

**Camlog**

**Dentegris**

**Friatec**

**IMZ**

**MIS**

**NeoSs**

**Nobel Biocare**

**SCHÜTZ Dental Group**

**Steri-Oss**

**Straumann**

**Thommen Medical**

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