WIELAND ZENOTEC select hybrid The innovative milling system





Customized digital solutions for every laboratory













All along the digital process chain, unparalleled solutions are offered, which a products and services for the CAD/CAM production of fixed and removable prosthetics.



WIDE RANGE OF MATERIALS

The Zenotec select hybrid system features coordinated materials that cover a broad and comprehensive spectrum of indications. The materials include ceramics, such as zirconium oxide and lithium disilicate, as well as acrylic resins (PMMA, PU) and wax.



ECONOMICAL AUTOMATION DUE TO 8-DISC MATERIAL CHANGER

The machine incorporates automatic materials management in the form of the 8-disc material changer. Depending on the restoration, a suitable material is selected and automatically inserted into the machine. This feature enables laboratories to process milling jobs automatically and in sequence. The working hours of the laboratory can be fully exploited. Processed materials are subsequently transferred back to the stack, from where they can be removed without interrupting the milling or grinding operation. A software-controlled workflow manages the switchover from wet to dry operation and vice versa in no time.

Zenotec[®] select hybrid

The innovative milling system

Zenotec® select hybrid is distinguished by its precision and productivity. The milling system combines state-of-the-art five-axis simultaneous operation with the advantages of automated manufacture and compact design.



MANUFACTURING WITHOUT LIMITATIONS DUE TO 5-AXIS OPERATION

The 5-axis simultaneous milling protocol enables the reproduction of the most complex of shapes, even those featuring undercuts and different insertion directions. Consequently, the equipment has an extensive application spectrum.

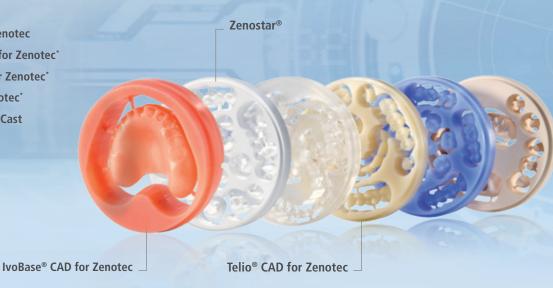
Dry Milling



Zenotec select hybrid is distinguished by its precision and efficiency in the dry milling of a wide array of dental materials. Premium components and proven milling strategies in combination with a broad range of materials ensure top-quality, high-precision results. The integrated 8-disc material changer allows different types of materials to be processed automatically.

MATERIALS

- Zenostar®
- Telio® CAD for Zenotec
- ProArt Wax Disc for Zenotec*
- IvoBase® CAD for Zenotec*
- Tray Disc for Zenotec*
- Zenotec® PMMA Cast
- Zenotec[®] Model







ADVANTAGES

- Coordinated materials for a wide range of indications
- High precision and accuracy of fit due to top-quality machine components
- Automated job processing due to the 8-disc material changer
- Exceptional productivity and short processing time as a result of optimized milling strategies





Wet Grinding

Zenotec select hybrid is distinguished by its dependability and high-precision in the wet grinding of glass-ceramics. The system is specially designed to fulfil the requirements of IPS e.max CAD for Zenotec and therefore offers maximum quality and productivity. The innovative multiholder IPS e.matrix allows six blocks to be machined in one grinding sequence.





ADVANTAGES

- Exclusively developed for machining IPS e.max® CAD for Zenotec
- IPS e.matrix multiholder with space for up to six blocks
- High-precision restorations showing excellent surface quality
- Coordinated milling tools and milling strategies

Accessories



Zenotec[®] cyclon

The powerful, sound-insulated extraction unit smoothly blends into the laboratory environment. In addition, the low-maintenance unit is very quiet. The cyclone technology helps to protect the filters. Milling dust is easy to remove by means of dust bags.

- Minimal filter use due to cyclone technology
- Maximum extraction performance due to low filter resistance
- Powerful and low-maintenance due to brushless turbines



Zenotec® hydro

Zenotec hydro is a state-of-the-art water cooling system. It is specially designed for the equipment and the materials of the Zenotec select hybrid milling system.

- High pumping pressure for optimal cooling of the cutting tools and materials
- High-capacity membrane pump
- Low-maintenance pump due to brushless turbines



IPS e.matrix

The patented multiholder IPS e.matrix allows up to six blocks of various sizes to be machined in one grinding sequence. The multiholder is easy to remove from the stack and can therefore be loaded outside the machine.

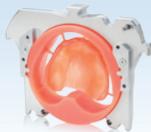
- Space for up to six different blocks of different sizes and colours
- Ideally matched to the Zenotec select hybrid milling system



Digital Denture holder

This holder, which has been specially designed for digital dentures, enables the exact repositioning and renewed machining of previously used discs. This means that after having milled the upper side of a denture, it can be conveniently removed in order to cement the pre-fabricated teeth. Subsequently, it is clamped into the Digital Denture holder again to mill the basal surface.

- Precise repositioning of previously machined discs
- Perfectly matched to the Digital Denture processing procedure





Tools

The milling and grinding tools have been developed specifically for Zenotec select hybrid. They are characterized by durability and versatility. Apart from the standard machining tools for zirconium oxide, PMMA and wax, the assortment also comprises high-quality diamond-coated cutters for wet grinding applications.

- Specially developed for the machining requirements of Zenotec materials and the associated milling strategies
- High quality and long service life
- Broad variety of shapes for different requirements











Technical specifications

Dimensions in cm (w x h x d)	49.0 x 54.0 x 44.5 (without changer) 69.2 x 54.0 x 44.5 (including changer)
Weight	75 kg (without changer) 95 kg (including changer)
Spindle	synchronous spindle with 4 hybrid ball bearings and integrated inner taper shank cleaning max. output 600 W, max. speed 60,000 rpm
Tool holder	pneumatic chuck for tools with 3-mm shank
Tool positions	16; including replacement tool management system
Automatic tool measurement with breakage detection	/
Inclination angle of the rotation axis	± 180° (A-axis) and ± 30° (B-axis)
Repeatability value	± 0.003 mm
Material changer (optional)	for 8 discs
Remote maintenance	✓
Compressed air connection	min. 7 bar
Voltage / Frequency	230 V / 50 Hz



Zenotec select hybrid including material changer



Zenotec select hybrid



Zenotec® select ion

In addition to Zenotec select hybrid, the new Zenotec select ion is now available. This machine is particularly suitable for the machining of complete dentures from PMMA discs.

The innovative ionizer concept for the first time enables acrylic materials and acrylic-like materials to be handled efficiently and expediently. During the milling process, ionized compressed air is directed onto the tools and materials via targeted nozzles. As a result, the static electricity that builds up is neutralized and the acrylic chips and acrylic particles can be conveniently evacuated.

all digital — all options

Customized digital solutions for every laboratory



All along the digital process chain, unparalleled solutions are offered, which comprise products and services for the CAD/CAM production of fixed and removable prosthetics. Dental laboratories have a wide choice of fully coordinated products including scanners, materials and equipment. The system is complemented by a comprehensive range of services. As a result dental laboratories benefit from optimized workflows and maximum productivity and flexibility.





www.wieland-dental.de

