







CORITEC® preMill Manufacturing System

QUALITY ASSURANCE THROUGH 510(K) CLEARANCE

The validated complete Package CORITEC® preMill

INCLUDING ALL VALIDATED ADDITIONAL COMPONENTS

CORITEC on the preMill System Package:

- CORiTEC milling machine
- Case incl. 1-fold preMill holder,
 6 preMills of your choice incl.
 abutment screw, CORITEC
 iCAMHD software, CAD library,
 tool/milling tool set

CORITEC 150i PRO preMill System Package:

- CORiTEC milling machine
- Case incl. 6-fold preMill holder, 6 preMills of your choice incl. abutment screw, CORITEC iCAMHD software, CAD library, tool/milling tool set



The CORITEC® preMill Manufacturing Systems

WHAT ARE THE DIFFERENCES?





CORITEC on the preMill CORITEC 150i PRO preMill

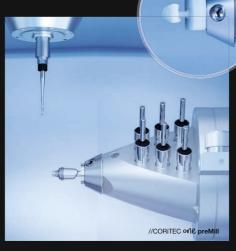
Machining axes	4 axes	5 axes
Touchscreen	✓	✓
Integrated PC	✓	✓
Premilled abutments	✓ (CoCr/Ti)	✓ (CoCr/Ti)
Wet processing	✓	✓
Dry processing	-	✓
Metal processing	✓ (Abutments)	√ (Abutments/Blanks)
Integrated water tank	✓	✓
Autocalibration	✓	✓
Automated cleaning function	✓	✓
Clamping system	Single holder	98 mm Blank holder
Adapter system	Single holder Blocks/preMills	6-fold Blocks/preMills/Blanks
Automatic tool changer	6-fold	10-fold

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CORITEC® one preMill System

UNLIMITED FREEDOM WHEN
MILLING OR GRINDING BLOCKS
OR CORITEC PREMILLS





Thanks to the precise rotation axis, CORITEC preMills and blocks can be machined with optimum quality using the turn-grind process. The automatic 6-fold tool changer ensures full flexibility in material selection.

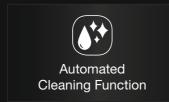
























CORITEC® 150i PRO preMill System

5-AXIS DRY OR WET MILLING OF ALL MATERIALS FROM BLANKS, BLOCKS OR CORITEC PREMILLS





Every restoration is produced with optimum precision, and at the same time the flexibility opens up virtually free choice of materials and indications. Milling or grinding of blanks in zirconia, plastic and metal is possible, as is the processing of CAD/CAM blocks as well as blanks or CORITEC preMill abutments. The CORITEC 150i PRO preMill offers an unrivaled range of applications in the smallest possible space.

*Validated and optimized for preMill machining

The CORITEC® preMill Systems

MORE PERFORMANCE, MAXIMUM FLEXIBILITY
AND EXTENDED APPLICATION POSSIBILITIES
WITH LOW SPACE REQUIREMENTS

The new powerful and durable high-frequency spindle with 860 watts and 100,000 rpm offers an exceptional ratio of performance, speed and precision. Thanks to the quick-change clamping system, the various holder systems can be changed quickly - while maintaining the same precision. This eliminates the need for time-consuming calibrations.









A WIDE RANGE OF CORITEC
IMPLANT SYSTEMS WITH
FULL COMPATIBILITY TO
THE HOLDER SYSTEM AND THE
INTEGRATED CAM SOFTWARE



CORITEC® one preMill

THE INTELLIGENT PRACTICE LAB SOLUTION

The new CORITEC on preMill is the perfect choice for processing all common CAD/CAM blocks and CORITEC preMill abutments. With the new extremely stable axis kinematics, the machine is also capable of milling premilled abutments in high quality.

The high-quality cast aluminum construction ensures maximum stability with lowest space requirements. An integrated powerful PC along with 10.1" HD touchscreen display supports comfortable and ergonomic operation. A single block holder with six tool change positions guarantees an intelligent, economical, safe and fast machining process with the highest quality.

In combination with all open scanners, the CORTEC one preMill is ideal for all dental practices, practice laboratories and clinics. As a supplementary system for the specialized processing of glass ceramics, zirconia, composite and in particular for premilled abutments, the CORTEC one preMill leaves nothing to be desired for clinics, laboratories and milling centers.

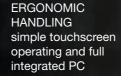


CORITEC® one preMill

HIGHLIGHTS

- Metalworking*
- Minimal footprint
- Integrated PC
- Autocalibration
- Short payback time
- Integrated CAM system
- Automatic cleaning function
- Extremely short grinding and milling times
- Integrated, validated CORiTEC **preMill** holder system
- Novel closed mono-block cast body for stability and precision
- Self-sufficient operation without external compressed air
- High precision due to integrated temperature compensation
- Perfect for machining CORiTEC **preMill** abutments as well as all common block materials

*for preMill machining



EASY CLEANING Fully coated Enclosed wet cell

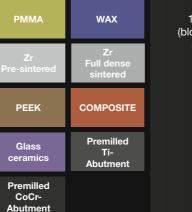
MINIMAL **FOOTPRINT** ideal for dental office

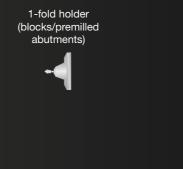
SELF-SUFFICIENT **OPERATION** No external compressed air needed



POWERFUL PERFORMANCE high end spindle for milling and grinding up to 100.000 rpm

INTEGRATED WATER SUPPLY AND FILTRATION

























CORITEC® 150i PRO preMill

THE FLEXIBLE MILLING SYSTEM IN CONFINED SPACES

The extremely stable design of the mono-block cast body enables precise machining in round and block form as well as CORITEC preMill abutments for all common materials. The machine's small dimensions and 5-axis simultaneous technology thus offer a unique ratio of machine size to functionality. Convince yourself of the performance of the CORITEC 150i PRO preMill for your laboratory!



CORITEC® 150i PRO preMill

HIGHLIGHTS

- Integrated **preMill** holder system
- Integrated Dental CAM System
- Wet and dry machining possible
- Short payback time
- Minimal footprint
- Autocalibration
- Automated cleaning function
- Semi-open blank holder "C-Clamp" (optional)
- Metal machining of blanks and CORiTEC **preMill** abutments
- High precision due to integrated temperature compensation
- Novel, closed mono-block cast body for highest stability and precision

ERGONOMIC HANDLING simple graphical touchscreen operation

HALF-OPEN **BLANK HOLDER** "C-CLAMP" (OPTIONAL)

> WET AND DRY PROCESSING POSSIBLE



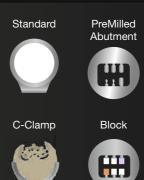
EASY CLEANING fully coated enclosed wet cell

POWERFUL PERFORMANCE high end spindle for milling and grinding work up to 100.000 rpm

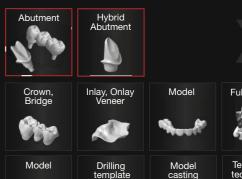
INTEGRATED WATER TANK AND FILTRATION

INTEGRATED TEMPERATURE COMPENSATION

РММА WAX COMPOSITE PreFab PEEK **Abutments** Ti ceramics CoCr







MORE PERFORMANCE & MAXIMUM FLEXIBILITY

for more possibilities

CORITEC® preMill Tools | 3 mm shaft





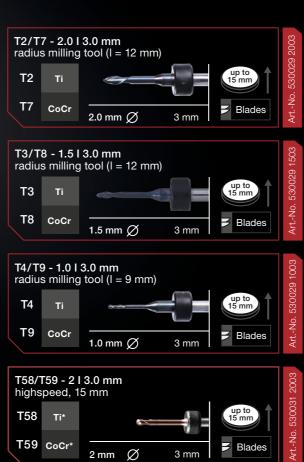
The CORITEC tool set is included in the scope of delivery for the CORITEC **preMill** manufacturing systems, so that precise machining can be started immediately!

ALL TOOLS

AND MATERIALS –

JUST SCAN HERE...





* T58 - Machining of preMill abutments
T59 - Machining of blanks up to 15 mm and preMill abutments

Compatible CORITEC preMill Platforms for Implant Systems

All CORITEC blanks, which are available in all implant systems, are supplied without exception including the corresponding abutment screw. When ordering the complete CORITEC 150i PRO preMill or CORITEC one preMill system, six blanks of your choice are included in the delivery.

The range of ORITEC **preMill** blanks is continuously being expanded with compatible platforms for implant systems.

Please feel free to contact us if you need a different platform. Or take a look at the current status via the QR code.



Manufacturer	Implant Type
Dentsply Sirona	Astra Tech EV Astra Tech TX XiVE
HIÓSSEN	Osstem ET
Nobel Biocare	Branemark System CC NobelActive Replace Tri-channel
straumann	Bone Level Neodent Grand Morse Standard Tissue Level
ZIMMER BIOMET	Certain Ex Hex Screw-vent (TSV)

... and more.

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CORITEC® SmartControl

SMART CONTROL OF MACHINE SOFTWARE

SmartControl: one touch ahead!

The newly developed control software SmartControl enables absolutely intuitive operation of our milling machines – from selecting the job to milling to querying the machine status. The self-explanatory and optimized handling makes it possible to start operating the machine in the shortest possible time. Starting a milling process requires only two clicks – you benefit from the smart time savings for your workflow!

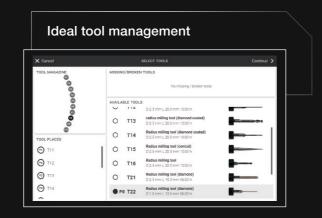
FEATURES

- Modern design and simple touch operation
- Intelligent selection of milling jobs
- Easy tool and material loading
- Autocalibration of the machine
- Wizard guided cleaning and maintenance

Automated transfer of information

- Connection to our Dental Smart Market (DSM)
- Multilingual program interface
- Automatic update function





CORITEC® ICAMHD Software

The CORITEC **iCAM***HD* software is included in the scope of delivery of both complete systems.

- High degree of automation
- Support for order management
- · Fast training through intuitive workflow
- Individual management of processing options
- Automatic update function
- Creation of individual quality standards
- Strategies for tool path generation
- Complete collision monitoring
- Free runtime in the first year including updates and support! Renewal for one additional further year against an update/support fee



	CAMHD one	iCAM <i>HD</i> eco
Milling Machine	CORITEC o¶ℓ preMill	CORITEC 150i PRO preMill
Number of axes	4 axes	5 axes
Materials	Glass ceramics, Titanium (preforms), PMMA, Zirconia, Composites, CrCo	Glass Ceramics, Titanium (preforms), PMMA, Zircon, Compo- sites, Wax, CrCo, Peek
Indications	Hybrid Abutments, Hybrid Abutment B ridges, Crowns/Bridges, Inlays/Onlays/Veneers, Preforms	Hybrid Abutments, Hybrid Abutment Bridges, Crowns/ Bridges, Inlays/Onlays/ Veneers, Preforms, Bite Splints, Models, Telescopes, Drilling Templates
Functionality	All Standard functions	All Standard functions
Optional		Denture Modul

Autocalibration

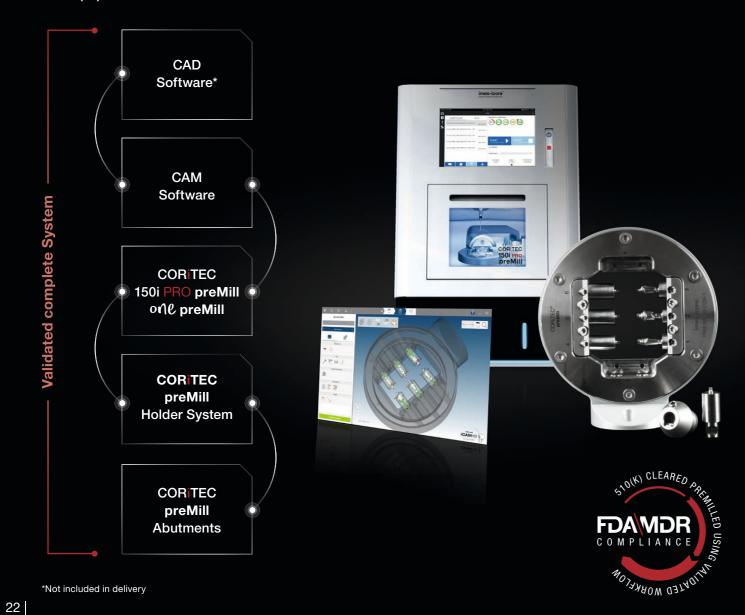
READY CALIBRATED **PREMILL** SYSTEM

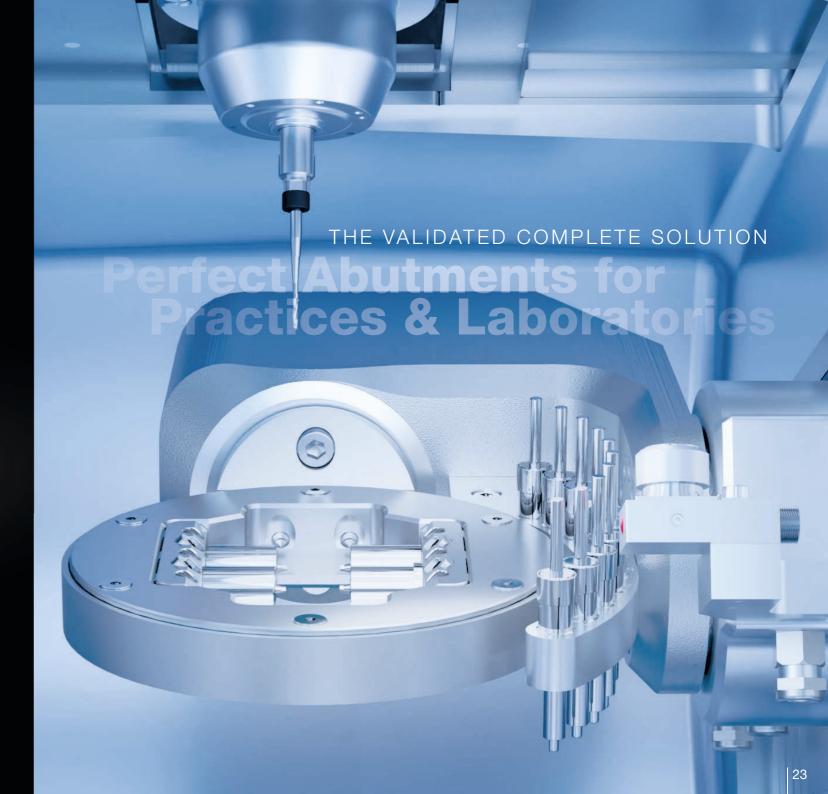
Fast, precise, cost-efficient – autocalibration enables dentists as well as dental technicians to handle quickly and easily to ensure lasting precision without compromise. The autocalibration is included in the starter kit, which can be ordered separately.



Full integrated workflow

510(K) CLEARED COMPLETE SYSTEM





Validation Advantages

The advantages of validation are obvious! Precisely coordinated components and strategies create a guided certified workflow. Reproducible results can thus be created quickly and reliably. The 510(k) clearance is coordinated for in-house milling of CORITEC preMills on the CORITEC milling machines.

HIGHLIGHTS

- Complete and open for the most important implant platforms
- Digital workflow solutions for major implant indications
- Suitable for in-house or outsourced production
- Coordinated clamping and calibration systems for CORiTEC milling machines/holders/adapters
- Validated and optimized CAM strategies for CORiTEC milling machines/preMills/tools
- Batch-certified preMills incl. unique marking for individual identification
- Libraries for exocad and 3Shape with associated parameters
- Optimized tools for coordinated manufacturing processes, quality and precision
- Defined milling results for reproducible results





Regulations and Risk Minimizations through validation



In the US, the FDA classifies customer-specific milling as the manufacture of a Class II medical device. Labs milling custom implant abutments with CAD/CAM technology must either commission a validated milling center (VMS) with a listing of the facility and devices, and implement a Quality Management System or use products with a 510(k) pre-market clearance and registration with a validated digital workflow.

THE LIABILITY RISKS ARE GREAT AND CAN BE COSTLY IN THE EVENT OF NON-COMPLIANCE:

- Production stop of product lines for laboratories are possible
- Investments in subsequent equipment and approvals become a burden
- Profitability decreases



Your Solution

The use of the FDA-cleared CORiTEC preMill abutments inside imes-icore validated workflow is essential for laboratories to produce custom abutments on-site. It ensures compliance with legal regulations, assists in creating restorations that meet the highest standards of safety and effectiveness, and reduces the risk of liability issues for the laboratory.

CORITEC® preMill Abutment

CUSTOMIZED SOLUTION WITH ADDED VALUE AND GROWTH FOR LABORATORIES AND PRACTICES

The CORTEC preMills are supplied with abutment screw, compatible libraries, modules and holders. This enables dental technicians and dentists in the laboratory and dental practice to manufacture customized one-piece abutments made of titanium with full control over quality and time - fully in accordance with FDA regulations.

ADVANTAGES

- Follows the natural morphology of the soft tissue
- Supports the gingiva and creates a root-shaped emergence
- Allows angulation for alignment of the prosthetic crown
- Adapts to the anatomical shape of the crown, providing perfect support and a larger bonding surface
- Allows a natural transition from the implant to the prosthetic crown
- Increases the value in the laboratory

Library Scan Body Hybrid Base (Ti-bases) **Prosthetic Screws** Analog for Printed Models (PMA)

preMill Abutment



FEATURES

- · Self-positioning stable mounting system for optimal positioning on the holder
- Laser marking with batch and part number for easy identification before and after the milling process and for legal legal traceability
- Full compatibility due to precision fit of the screw on the original interface
- **Self-locking screws** prevent loosening from the module
- Modular design of the holder (easy assembly, cleaning and easy replacement)
- One-tool concept simplifies mounting of the holder, modules and CORiTEC preMills by using a Torx 20 tool



MORE MAXIMUM FLEXIBILITY





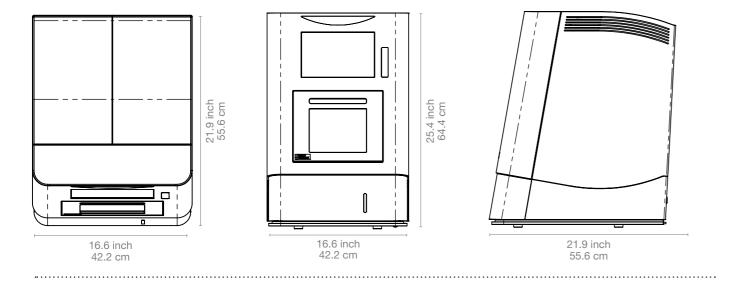
EXTRAS

- High degree of design freedom due to minimal gingival height and improved library geometry
- Perfect implant emergence profile, as no widening of the emergence profile above the implant diameter is required
- Smooth transition area significantly educes manual reworking
- Perfect CAM interaction due to automatic nesting by implementation of metadata

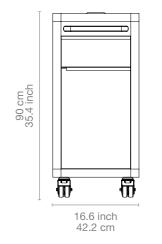
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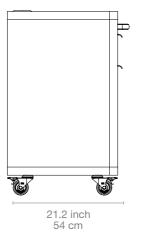
Dimensions

CORITEC® one preMill



Machine table T0



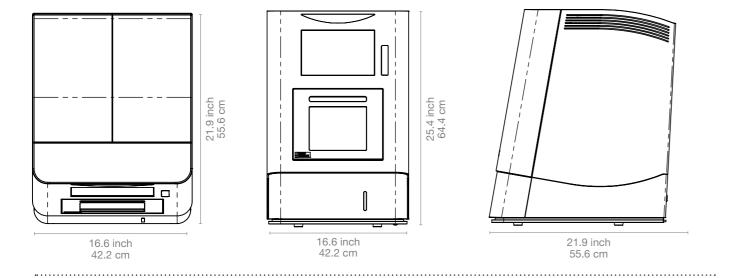


In numbers

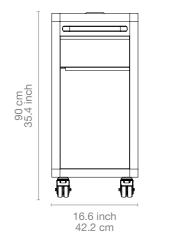
Mechanics/electronics	
Number of axes / operation type	4 axes, simultaneous processing
Angle of rotation	A-axis 360°
Spindle	High-frequency spindle
Maximum speed / spindle power	100.000 rpm , 860 watt
Tools	Milling and grinding tools with 3 mm tool shaft
Tool changer	6-fold
Tool length control	≤ 0.002 mm precision
Integrated PC	Windows based
Display	Integrated 10'1" touchscreen
Illumination	Dynamic LED illumination
Software	SmartControl integrated CNC software
Air pressure	No external air pressure needed
Cooling liquid	3 liter/11.36 gpm integrated
Connecting requirements	
Weight	77 kg / 169.8 lbs
Width x depth x height	16.6 x 21.9 x 25.4 inch / 422 x 556 x 644 mm
Line voltage/frequency/maximum power	100 V - 230 V/50/60 Hz/500 watt

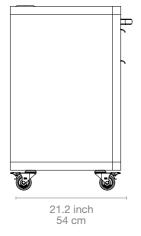
Dimensions

CORiTEC® 150i PRO preMill



Machine table T0





In numbers

Mechanics/electronics	
Number of axes and operation type	5 axes, simultaneous processing
Rotation angle	A-axis 360°, B-axis 130°
Spindle / power	High-frequency spindle / 860 W
Maximum spindle speed	100.000 rpm
Tools	Hilling and grinding tools with 3 mm tool shaft
Tool changer	10-fold
Tool length control	≤ 0.002 mm precision
Integrated PC	Windows based
Monitor	Integrated 10'1" touchscreen
Illumination	Dynamic LED illumination
Software	SmartControl integrated CNC software
Air pressure	3 bar/43.5 PSI, 50I/min/189.25 gpm/min
Cooling liquid	3 liter/11.36 gpm integrated
Connecting requirements	
Weight	75 kg / 165.38 lbs
Width x depth x height	16.6 x 21.9 x 25.4 inch / 422 x 556 x 644 mm
Line voltage/frequency	100 V - 240 V/50/60 Hz

Rev1.0

Sales and Support Partner worldwide



Represented for you in over 100 Countries.

imes-icore® GmbH has been a leading manufacturer and technology partner since 2003 in the field of dental CAD/CAM systems and solutions.

With its unique range of dental milling and grinding systems, imes-icore® offers a perfect selection for all individual requirements for dental laboratories, milling centres and dental practices of all sizes.

Our Open-System product philosophy makes it possible to easily integrate our milling machines into your existing workflow and to integrate them with your open scanners and your CAD/CAM software. We are open for your material selection.

imes-icore® GmbH

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