

CORiTEC® preMill Manufacturing Systems



The Complete Package for Validated and Certified preMill Production



imes-icore®
Dental & Medical Solutions

The Validated Complete Package CORiTEC® preMill

INCLUDING ALL VALIDATED ADDITIONAL COMPONENTS

CORiTEC onl preMill System Package:

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

CORiTEC 150i PRO preMill System Package:

- CORiTEC milling machine
- Case incl. CORiTEC preMill 6-fold holder, 6 CORiTEC preMill of your choice and CORiTEC prosthetic screw, CORiTEC **iCAMHD** software, CAD library, tool/milling tool set



The CORiTEC® preMill Manufacturing Systems

WHAT ARE THE DIFFERENCES?



| | CORiTEC onl 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 |

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.

*Validated and optimized for preMill machining

Metalworking*

Integrated CORiTEC
preMill Holder System

Integrated
CAM System

Without external
Compressed Air

Autocalibration

Automated
Cleaning Function

Metalworking*

Integrated CORiTEC
preMill Holder System

Integrated
CAM System

Without external
Compressed Air

Autocalibration

Automated
Cleaning Function

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.

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.

**High
Frequency Spindle**
[100.000 rpm]

**Manual Quick
Clamping
System**

// CORITEC 150i PRO preMill



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



Easy identification
by means of lot and part number



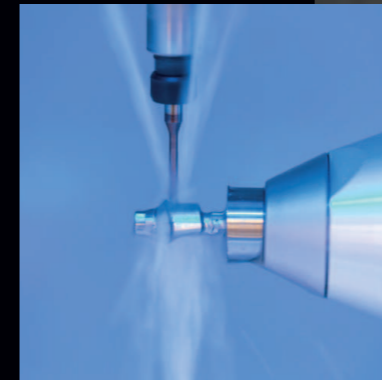
CORiTEC® one preMill

THE INTELLIGENT PRACTICE LAB SOLUTION

The new CORiTEC **one 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 **CORiTEC 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 **CORiTEC one preMill** leaves nothing to be desired for clinics, laboratories and milling centers.



More applications possible!



approx. 16.6 inch / 42.2 cm

WET

DRY

 $4AX$ 

3 mm
6x



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

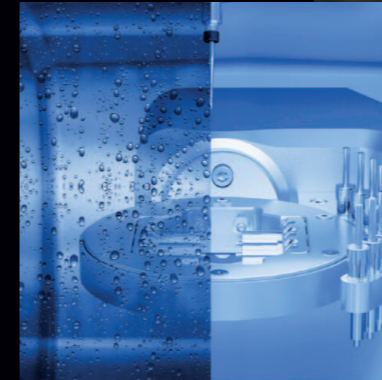


| | | | | | |
|--------------------------------|------------------------------|--|---------------------------------|---|--------------------------|
| PMMA | WAX | 1-fold holder (blocks/premilled abutments) | Abutment/ Hybrid Abutment | » | Crown, Bridge |
| Zr Pre-sintered | Zr Full dense sintered | | Inlay, Onlay Veneer | | Full Denture |
| PEEK | COMPOSITE | | Model casting | | Model |
| Glass ceramics | Premilled Ti- Abutment | | Bridge | | Drilling template |
| Premilled CoCr- Abutment | | | Telescopic technology | | Telescopic technology |

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!



More
applications
possible!



WET

DRY

5 AX

3 mm
10x



















ION

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



| | | | | | | | | | |
|----------------|------------------|---|---|---|---|---|---|---|---|
| PMMA | WAX | Standard | PreMilled Abutment | Dentures | Abutment | Hybrid Abutment | » | | |
| Zr | COMPOSITE |  |  |  |  |  | | | |
| PEEK | PreFab Abutments | C-Clamp | Block | Manual clamping system | Crown, Bridge | Inlay, Onlay Veneer | | Splint | Full Denture |
| Glass-ceramics | Ti |  |  |  |  |  | |  |  |
| CoCr | | | | | Model | Surgical guide | Model casting | Telescopic technology | |
| | | | | |  |  |  |  | |

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...



T2/T7 - 2.0 | 3.0 mm
radius milling tool (l = 12 mm)

| | | | | |
|----|------|--|--|--|
| T2 | Ti | | | |
| T7 | CoCr | | | |

2.0 mm Ø 3 mm

Art.-No. 530029 2003

T3/T8 - 1.5 | 3.0 mm
radius milling tool (l = 12 mm)

| | | | | |
|----|------|--|--|--|
| T3 | Ti | | | |
| T8 | CoCr | | | |

1.5 mm Ø 3 mm

Art.-No. 530029 1503

T4/T9 - 1.0 | 3.0 mm
radius milling tool (l = 9 mm)

| | | | | |
|----|------|--|--|--|
| T4 | Ti | | | |
| T9 | CoCr | | | |

1.0 mm Ø 3 mm

Art.-No. 530029 1003

T58/T59 - 2 | 3.0 mm
highspeed, 15 mm

| | | | | |
|-----|-------|--|--|--|
| T58 | Ti* | | | |
| T59 | CoCr* | | | |

2 mm Ø 3 mm

Art.-No. 530031 2003

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

Compatible CORiTEC® preMill Platforms for the Most Important Implant Systems

All CORiTEC preMill abutments are supplied with a matching abutment screw.

The range of CORiTEC preMill abutments is being continuously expanded with compatible platforms for implant systems.

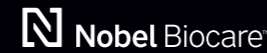
Feel free to contact us if you need a different platform.



Astra Tech EV
Astra Tech TX
XIVE



ET



Branemark System
Nobel CC
NobelReplace



Bone Level
BLX
Standard



Certain
External Hex Connection
Tapered Srew-Vent

...and more.

Compatibility

49 Platforms for the Most Important Implant Systems

| Article number | | Article number | |
|------------------|--------------|-----------------------|--------------|
| AstraTech EV 3.0 | CPMB-ATE30-1 | AstraTech TX 3.5/4.0 | CPMB-ATO35-1 |
| AstraTech EV 3.6 | CPMB-ATE36-1 | AstraTech TX 4.5/5.0 | CPMB-ATO45-1 |
| AstraTech EV 4.2 | CPMB-ATE42-1 | Biomet 3i Certain 3.4 | CPMB-BCE34-1 |
| AstraTech EV 4.8 | CPMB-ATE48-1 | Biomet 3i Certain 4.1 | CPMB-BCE41-1 |
| AstraTech EV 5.4 | CPMB-ATE54-1 | Biomet 3i Certain 5.0 | CPMB-BCE50-1 |

| Article number | | Article number | |
|-----------------------|--------------|-------------------------|--------------|
| Biomet 3i Certain 6.0 | CPMB-BCE60-1 | NobelReplace WP | CPMB-NBR50-1 |
| Biomet 3i Ex Hex 3.4 | CPMB-BEH34-1 | NobelReplace 6.0 | CPMB-NBR60-1 |
| Biomet 3i Ex Hex 4.1 | CPMB-BEH41-1 | Straumann Bone Level NC | CPMB-SBO33-1 |
| Biomet 3i Ex Hex 5.0 | CPMB-BEH50-1 | Straumann Bone Level RC | CPMB-SBO41-1 |
| Biomet 3i Ex Hex 6.0 | CPMB-BEH60-1 | Straumann BLX | CPMB-SBX45-1 |
| Brånemark NP | CPMB-BRA41-1 | Straumann Standard RN | CPMB-SSY48-1 |
| Brånemark RP | CPMB-BRA35-1 | Straumann Standard WN | CPMB-SSY65-1 |
| Brånemark WP | CPMB-BRA51-1 | Zimmer Screw-vent 3.5 | CPMB-ZSV35-1 |
| Camlog 3.3 | CPMB-CAS33-1 | Zimmer Screw-vent 4.5 | CPMB-ZSV45-1 |
| Camlog 3.8 | CPMB-CAS38-1 | Zimmer Screw-vent 5.7 | CPMB-ZSV57-1 |
| Camlog 4.3 | CPMB-CAS43-1 | Xive D3.0 | CPMB-DXI30-1 |
| Camlog 5.0 | CPMB-CAS50-1 | Xive D3.4 | CPMB-DXI34-1 |
| Camlog 6.0 | CPMB-CAS60-1 | Xive D3.8 | CPMB-DXI38-1 |
| Hiossen ET Mini | CPMB-HET35-1 | Xive D4.5 | CPMB-DXI45-1 |
| Hiossen ET Regular | CPMB-HET45-1 | Xive D5.5 | CPMB-DXI55-1 |
| Neodent GM | CPMB-NGM45-1 | | |
| Nobel CC 3.0 | CPMB-NBA30-1 | | |
| Nobel CC NP | CPMB-NBA35-1 | | |
| Nobel CC RP | CPMB-NBA43-1 | | |
| Nobel CC WP | CPMB-NBA60-1 | | |
| NobelReplace NP | CPMB-NBR35-1 | | |
| NobelReplace RP | CPMB-NBR43-1 | | |

Registered trademark //
Not a company
of imes-icore GmbH

For the markets
**USA, Europe,
Great Britain
and Switzerland**

CORiTEC® SmartControl

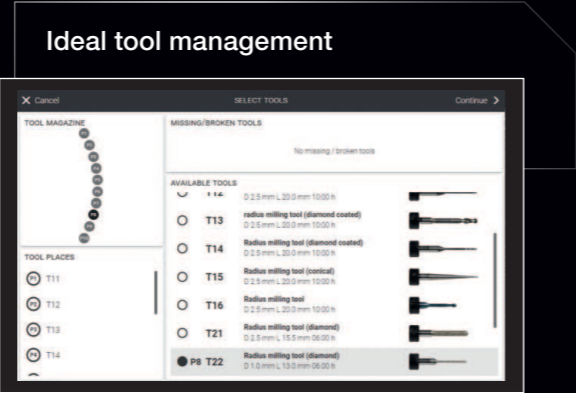
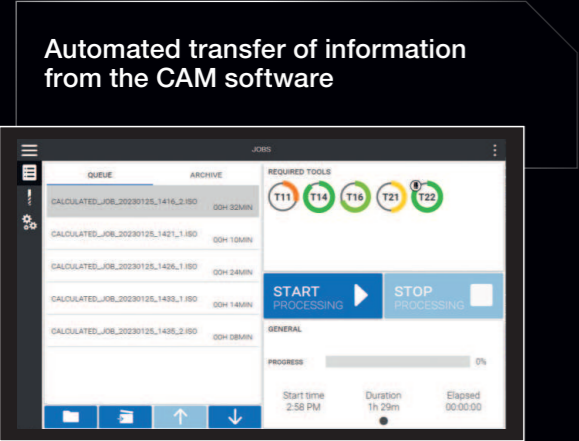
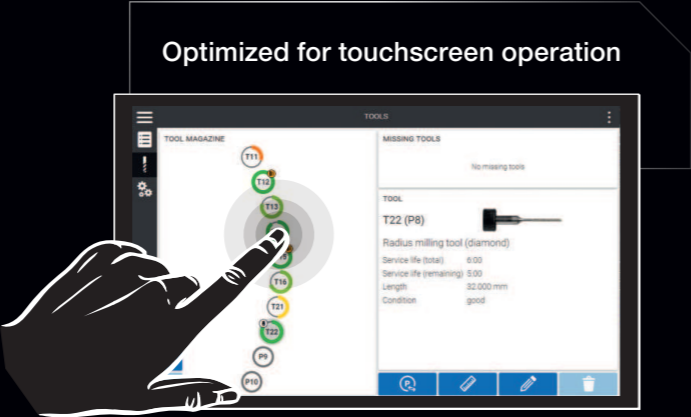
SMART CONTROL OF MACHINE SOFTWARE

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



CORiTEC® iCAMHD Software

The CORiTEC **iCAMHD** 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

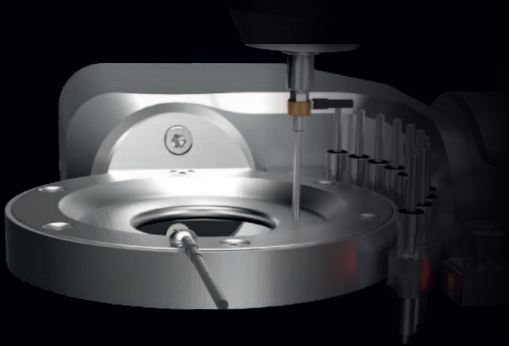


| | CAMHD one | iCAMHD eco |
|-----------------|--|--|
| Milling Machine | CORiTEC one preMill | CORiTEC 150i PRO preMill |
| Number of axes | 4 axes | 5 axes |
| Materials | Glass ceramics, Titanium (preforms), PMMA, Zirconia, Composites, CrCo | Glass Ceramics, Titanium (preforms), PMMA, Zircon, Composites, Wax, CrCo, Peek |
| Indications | Hybrid Abutments, Hybrid Abutment Bridges, 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.

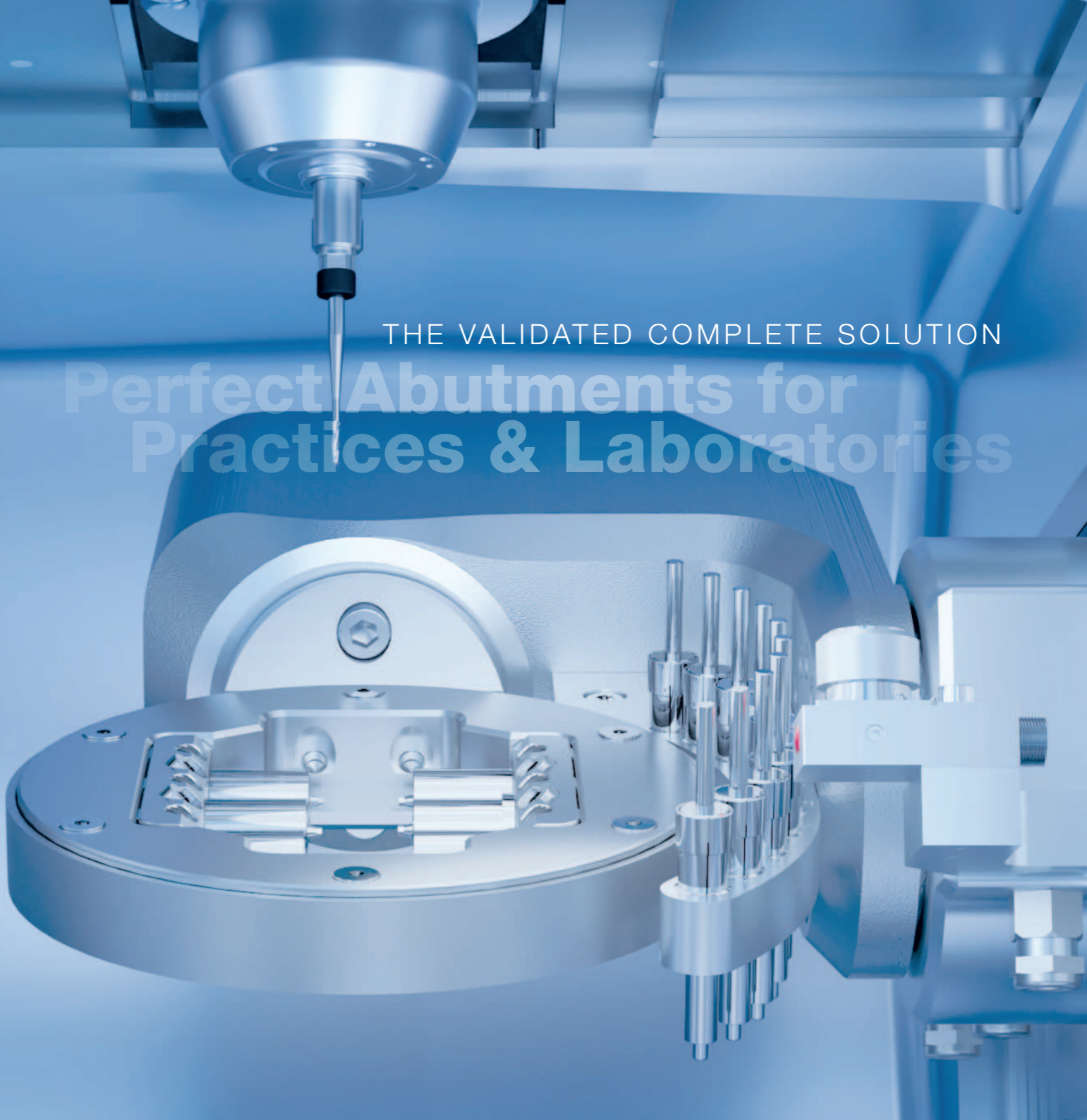


Fully Integrated Workflow

510(K) CLEARED COMPLETE SYSTEM



*Not included in delivery



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

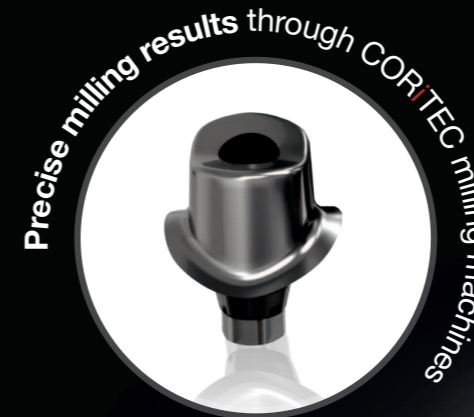
The use of the FDA-cleared CORiTEC preMill abutments inside imes-icore validated workflow is essential for laboratories to produce custom abutments on-site. It ensures compliance with legal regulations, assists in creating restorations that meet the highest standards of safety and effectiveness, and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

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



CORiTEC® preMill Abutment

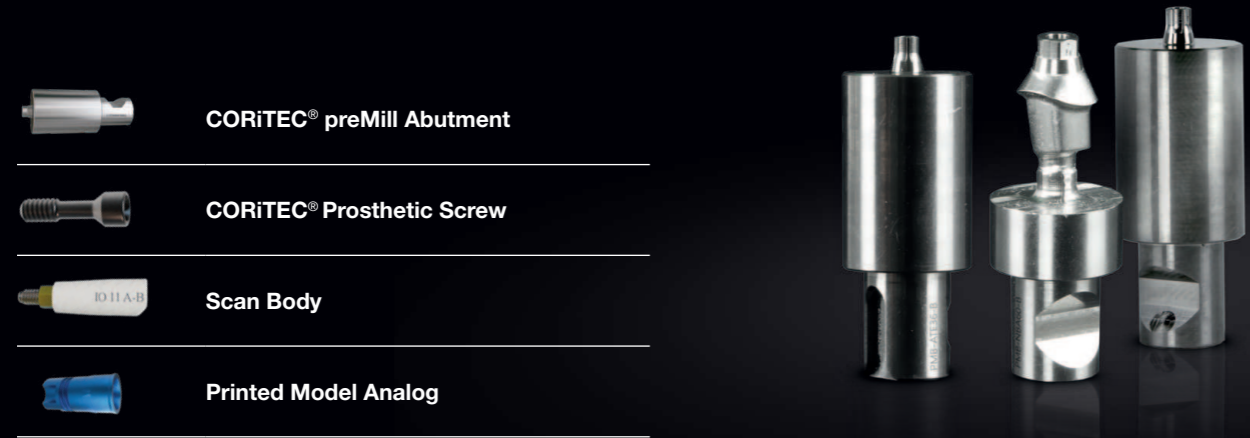
CUSTOMIZED SOLUTION WITH ADDED VALUE AND GROWTH FOR LABORATORIES AND PRACTICES

The CORiTEC preMills Abutments are supplied with a CORiTEC prosthetic screw and a CORiTEC preMill holder. 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 MDR and FDA regulations.

ADVANTAGES

- Adapts to 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

The CORiTEC preMill System



FEATURES

- **Self-centering:**
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 regulatory traceability
- **Full compatibility** due to precision fit of the screw on the original interface

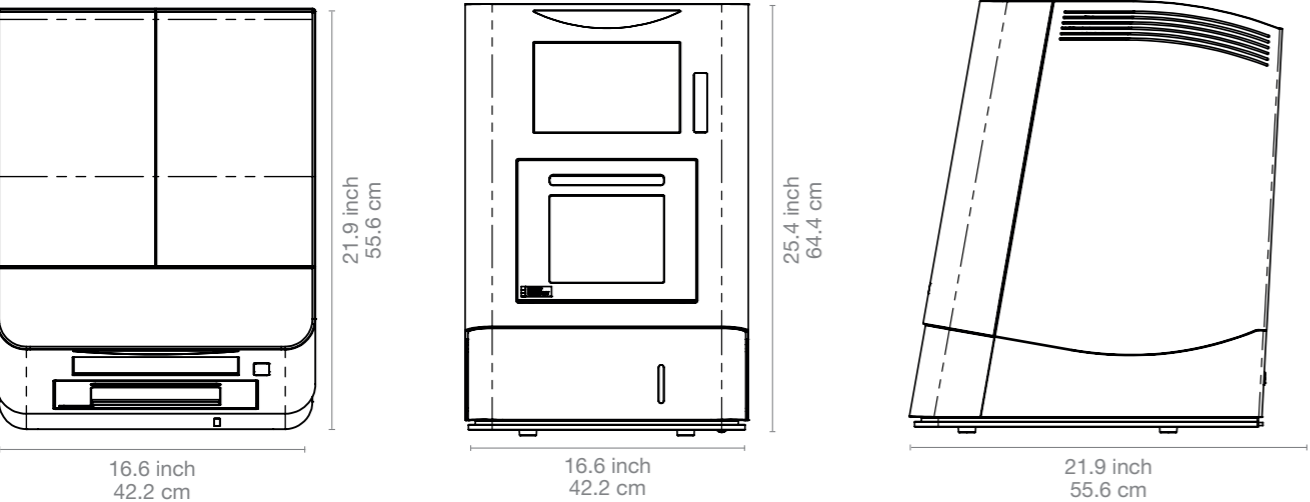


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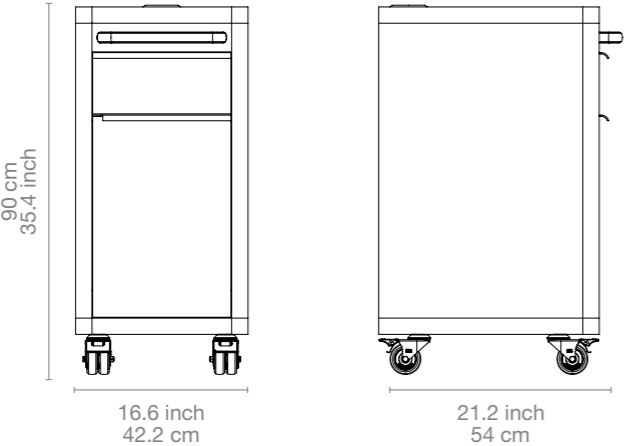
- **High degree of design freedom** due to minimal gingival height and improved library geometry
- **Perfect implant emergence profile**, as no widening of the emergence profile above the implant diameter is required
- **Smooth transition area:** Significant reduction in manual rework
- **Perfect CAM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

Dimensions

CORiTEC® one preMill



Machine table T0

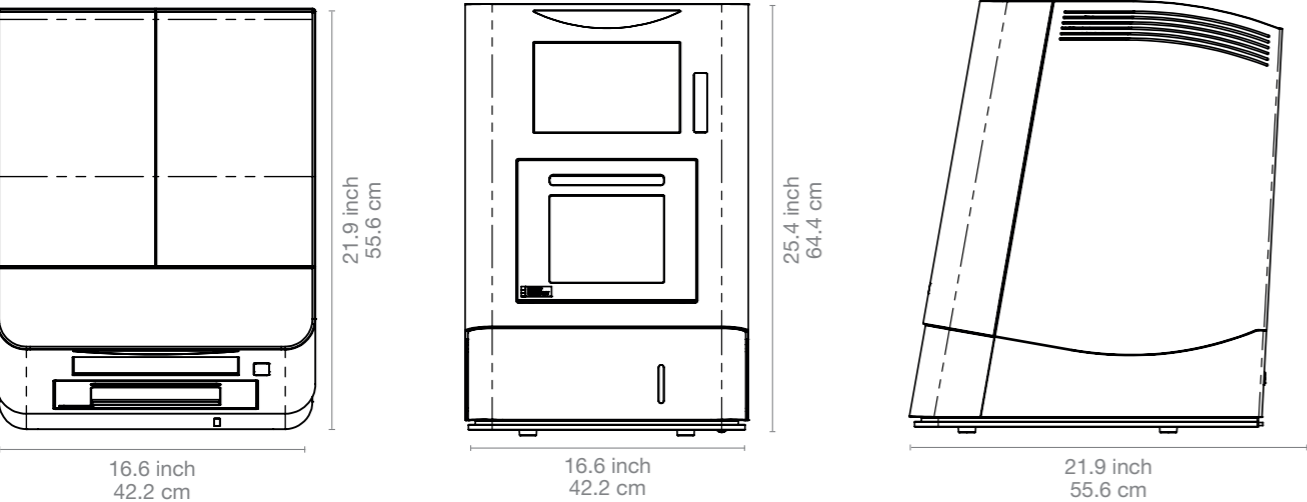


In Numbers

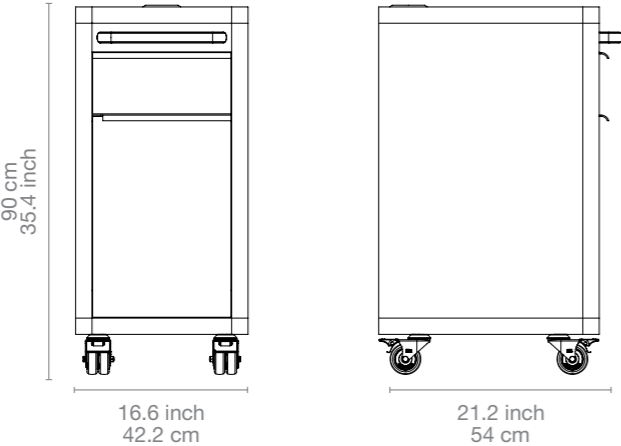
| Mechanics/electronics | |
|--------------------------------------|---|
| Number of axes / operation type | 4 axes, simultaneous processing |
| Angle of rotation | A-axis 360° |
| Spindle | High-frequency spindle |
| Maximum speed / spindle power | 100.000 rpm , 860 watt |
| Tools | Milling and grinding 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, 50l/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 |

Global Support

SALES AND SUPPORT PARTNERS
IN OVER 100 COUNTRIES



Since 2002, imes-icore® has been a leader in CAD/CAM systems for the dental industry. With customized solutions for laboratories, milling centers and dental practices of all sizes, we offer high-performance milling and grinding systems. Our open system philosophy guarantees easy integration into existing workflows.



To the imes-icore
Webseite



Configure machine
directly

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