imes-icore
Competence in CNC & DENTAL-Solutions

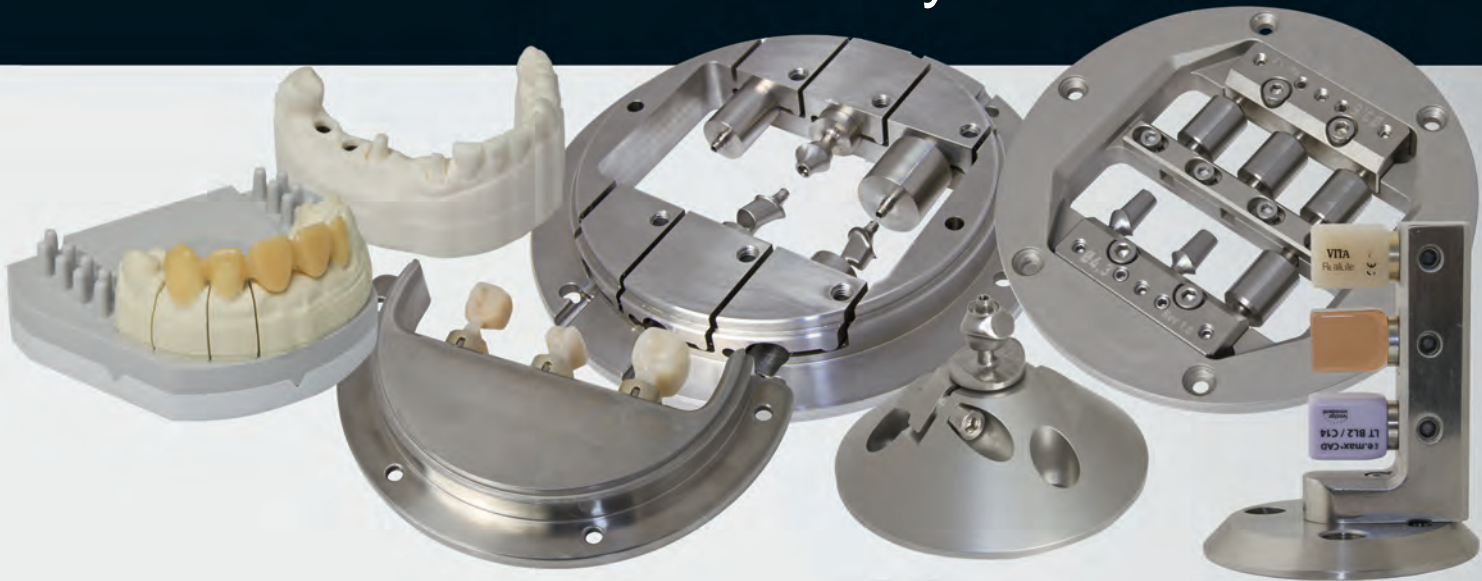# Applications and Functions for CORiTEC Machine Systems
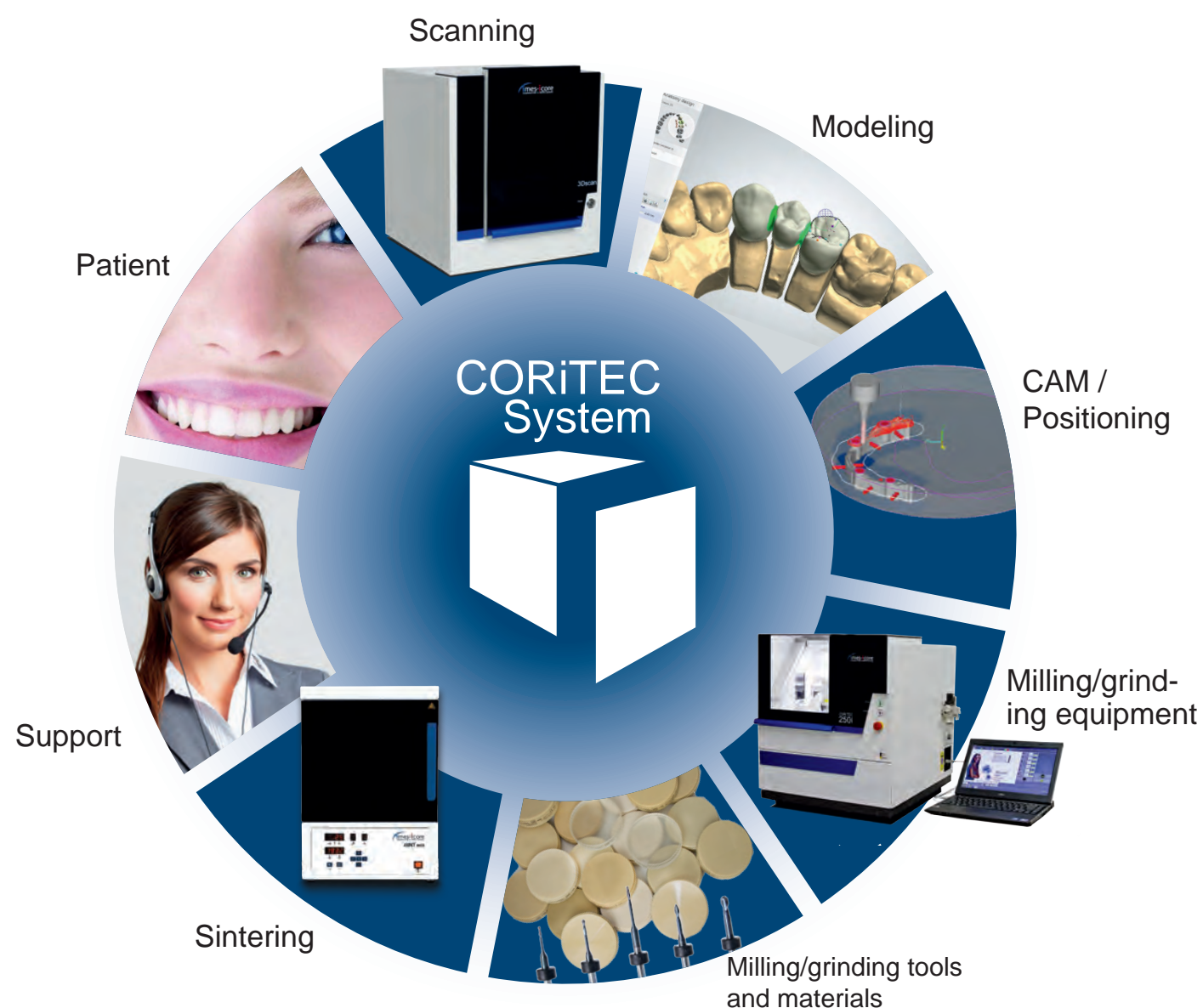
Materials for CORiTEC Machine Systems

Tools for CORiTEC Machine Systems

CORiTEC Dental-Solutions
www.imes-icore.de

CORiTEC
Accessories

The CORiTEC System

Perfectly matched machines and consumables ensure effective production processes, and lead to a whole new quality awareness. By now, more than 12 years of experience in the dental market has resulted in the third generation of a series with 10 different milling systems. Thus, imes-icore GmbH is the only company worldwide that offers its customers solutions optimally tuned for any lab and surgery size. Moreover, we not only offer individual components, but also complete solutions that enable you to start a process-safe production chain with the CAD/CAM system on the very first day.
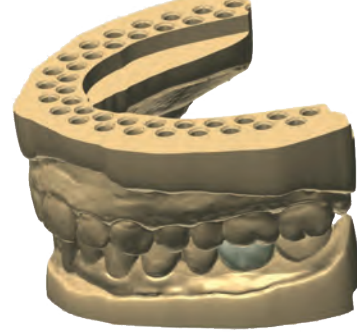
Scanning
Modeling
Patient
CAM / Positioning
Support
Milling/grinding equipment
Sintering
Milling/grinding tools and materials

CORiTEC System

Applikations-Kit

Model milling
(Baumann System +model with removable stumps)

Conditions

CAD:
3shape: Model creator™
exocad: DentalCAD

CAM:
iCAM V4.6
iCAM V5

CORiTEC milling machine:

245i dry	250i	550i	850i
245i	350i	650i	
250i dry	450i	750i	

With the revolutionary Baumann model system, for the first time it is now possible to manufacture fully milled saw-cut models, analogous to the previously known (plastered) saw-cut models. The scan is done either directly with an intraoral scanner, or alternatively as a classical impression scan. In a few steps, the digital model can then be generated with a CAD software (3shape or exocad). The pull force of the individual segments can be set directly in the CAM to match your entire system.

The special model blanks also contribute to a complete system solution. It is an extremely well machinable plastic that offers a sufficient degree of accuracy, and very good edge stability.

The result is a classic, familiar saw-cut model without drawbacks of the conventional model production.

Highlights:

- No impact of blood a. saliva
- Reproducible milling
- No impact of impression materials (contraction) a. plaster (expansion)
- No manual processing of dental arch (gluing tillers, casting model plates)
- Pinned and cut
- Full-fledged saw model, fully articulable (incl. split-cast plate)
- Magnet system
- Optimized model material with high edge stability and degree of accuracy
- Short milling times
- Reproducible results
- For 3shape a. exocad

Material:

A special, plaster-like plastic blank adapted to the requirements for dental model materials is available.

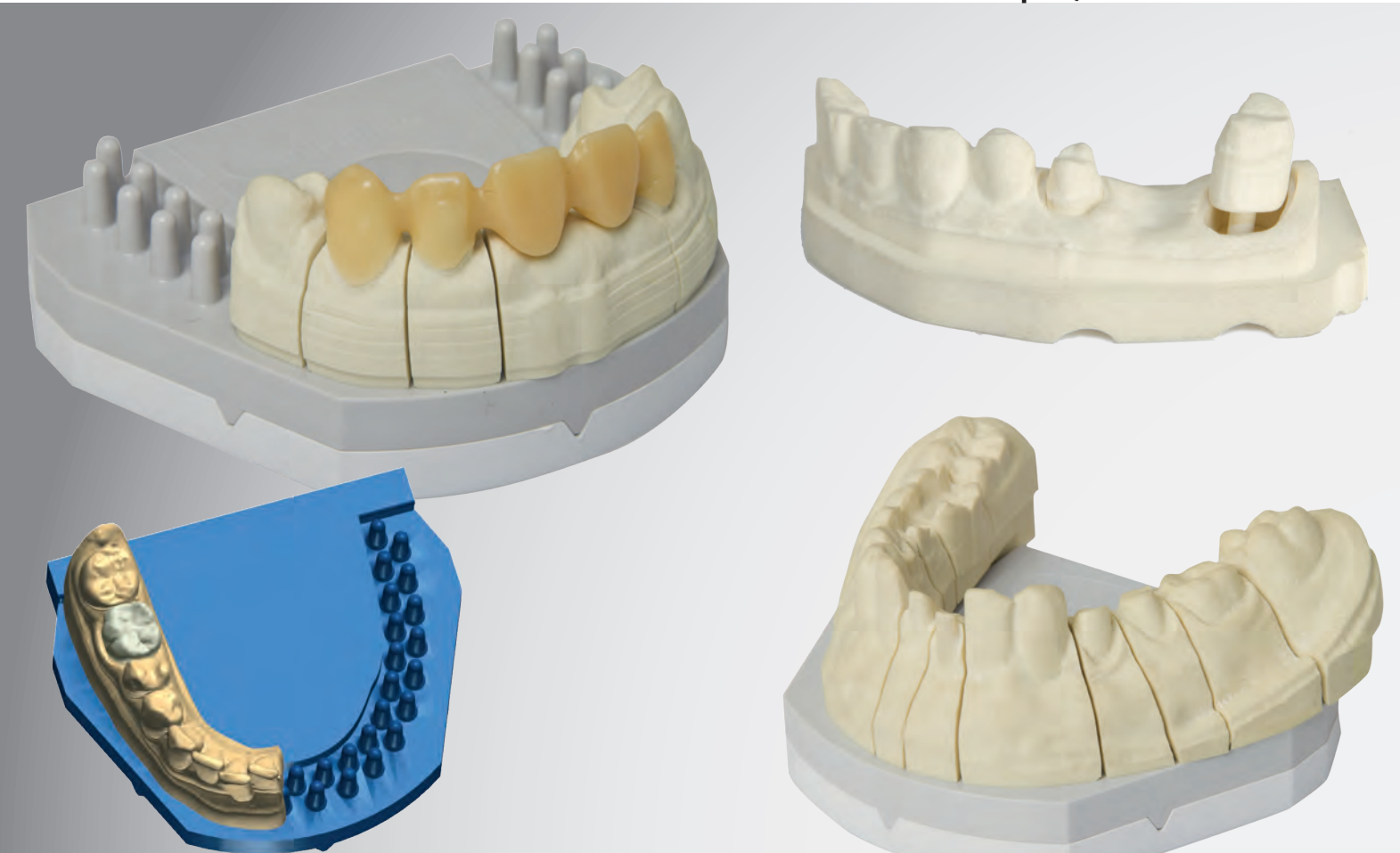| Material	Dimensions (mm)	Item no.
CORiTEC model disc ivory	98 x 15	525013 9815
CORiTEC model disc ivory	98 x 20	525013 9820
CORiTEC model disc ivory	98 x 25	525013 9825
CORiTEC model disc ivory	98 x 30	525013 9830

Tools:

Models are made of plastic materials. For that reason, our standard plastic cutters are used. Since models are often produced in large numbers, the processing time plays an important role. To speed up the processing time, taking into account consistently high quality, special roughing tools with large diameters were developed for this application. With large tool diameters, the total processing time when roughing is greatly reduced.

Tool no.	Diameter/ Geometry	Material	Max. material height	Item no. 3 mm shaft	Item no. 6 mm shaft
T31	3,0 mm, shaft, single tooth cutter	PMMA / plastics	up to 25 mm	526012 3003	-
T30	4,0 mm, shaft, single tooth cutter	PMMA / plastics	up to 25 mm	-	526012 4006
T11	2,5 mm, radius	PMMA / plastics	up to 25 mm	526004 2503	526004 2506
T12	1,0 mm, radius	PMMA / plastics	up to 25 mm	526004 1003	526004 1006
T32	0,6 mm, radius (long), 12 mm clearance	Zr/PMMA/Wax	up to 25 mm	526012 0603	526012 0606

Information about the materials

Applikations-Kit

for milled implant models
(DIM analog of nt-trading)

Conditions

CAD:
3shape: Model Creator™

CAM:
iCAM V4.6
iCAM V5

CORiTEC milling machine:

245i dry	250i	550i	850i
245i	350i	650i	
250i dry	450i	750i	

Material:

A special plastic blank adapted to the requirements for dental model materials is made available.

Material	Dimensions (mm)	Item no.
CORiTEC Model Disc elfenbein	98 x 15	525013 9815
CORiTEC Model Disc elfenbein	98 x 25	525013 9825

Tools:

Tool no.	Diameter/ Geometry	Material	Max. material height	Item no. 3 mm shaft	Item no. 6 mm shaft
T31	3,0 mm, shaft, single tooth cutter	PMMA/plastics	up to 25 mm	526012 3003	-
T30	4,0 mm, shaft, single tooth cutter	PMMA/plastics	up to 25 mm	-	526012 4006
T11	2,5 mm, radius	PMMA/plastics	up to 25 mm	526004 2503	526004 2506
T12	1,0 mm, radius	PMMA/plastics	up to 25 mm	526004 1003	526004 1006
T32	0,6 mm, radius (long), 12 mm clearance	Zr/PMMA/Wachs	up to 25 mm	526012 0603	526012 0606

The basis for high-precision dental work is still the casting. The DIM (Digital Implant Model) was developed in order to create highly accurate models in the field of implant restorations. This makes it possible for the first time to enter the process chain of bolted implant applications in a fully digital mode. Thereby, the model production is fast and easy. The position and orientation definition takes place via the scan bodies. This process step can also be performed intraorally.

Implant analog to digital model production
• 2-piece implant analog
• Can be precisely positioned
• Position correction possible

List of supported systems:

E-Nobel Biocare Replace Select®™	3,5 NP/4,3 RP/5,0 WP/6,0
F-Nobel Biocare Nobel Active®™	3,5/4,3/5,0
H-Biomet 3i Certain®™	3,4/4,1/5,0
I-Biomet 3i Osseotite®™	3,4/4,1/5,0
K-Nobel Biocare Branemark®™	3,5/4,1/5,1
L-Straumann Bone Level®™	3,3 NC/4,1/4,8 RC
N-Straumann Synocta®™	3,5 NN/4,8 RN/6,5 WN
R-Zimmer Tapered Screw-Vent®™	3,5/4,5/5,7
S-Astra Tech Osseospeed®™	3,5/4,0/4,5/5,0
T-Dentsply-Friadent Frialit/Xive®™	3,4/3,8/4,5/5,5
Camlog®™	3,3/3,8/4,3/5,0/6,0

Further information at www.imes-icore.de

PreFace® Abutment holders
(Medentika)

Conditions

CAD:
3shape: Abutment Designer™
exocad: Implant/abutment
module

CAM:
iCAM V4.6
iCAM V5

CORiTEC milling machine*:

140i	450i	750i	4820
250i	550i	850i	
350i	650i	3020	

(*wet processing required)

Material:

Medentika: all blanks are made of either titanium grade 5 KV or CoCr. Blanks are available directly from Medentika.

Abutment systems:

B-Serie compatible with	Sky Bredent
D-Serie compatible with	Conelog
E-Serie compatible with	Nobel Biocare Replace Select®
F-Serie compatible with	Nobel Active®
H-Serie compatible with	Biomet 3i® Certain®
I-Serie compatible with	Biomet 3i® Außehex
K-Serie compatible with	Nobel Biocare Brånemark®
L-Serie compatible with	Straumann Bone Level®
N-Serie compatible with	Straumann SynOcta®
R-Serie compatible with	Zimmer Tapered Screw-Vent® SEVEN (hexagon socket) BioHorizons® (hexagon socket)
S-Serie compatible with	Astra Tech OsseoSpeed®
T-Serie compatible with	Dentsply-Friadent Frialit/Xive® M-Implant

Medentika PreFace® abutment holders

One-piece abutments in industrial quality? System solutions make it feasible. All you need is the respective starter kit from imes-icore. You can then order more blanks directly from the manufacturer. In the design process, you design and cut only the anatomically reduced form.

Highlights:

- Manufacturing is much more precise than using traditional holders due to the innovative one-sided design
- Short manufacturing times due to simultaneous processing of six blanks in a single operation
- Particularly time-saving operation as the abutment is tensioned with only one screw in the holder
- Maximum protection for precisely designed implant interface as the abutment is tensioned only on the front side

Tools:

Tool no. titanium	Tool no.	Diameter/ Geometry	Material	Max. material height	Item no. 3 mm shaft	Item no. 6 mm shaft
T1	T6	3,0 mm, radius	CoCr/Ti	up to 15 mm	526018 3003	526011 3006
T2	T7	2,0 mm, radius	CoCr/Ti	up to 15 mm	526018 2003	526011 2006
T4	T9	1,0 mm, radius	CoCr/Ti	up to 15 mm	526018 1003	526011 1006

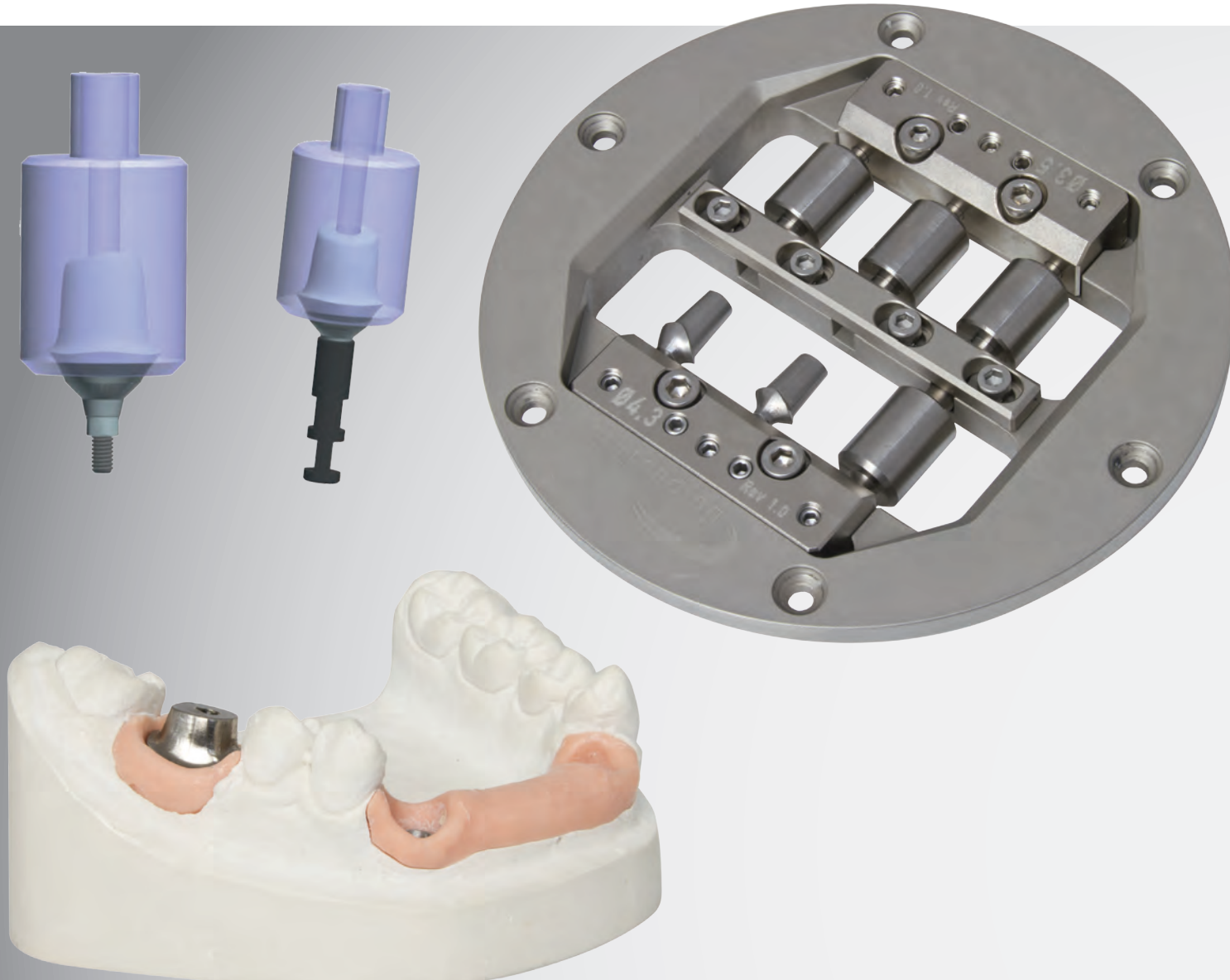## Starter kit available!

Starterkit Medentika PreFace®
with six PreFace® abutments and all required accessories

MEDENTiKA® GmbH
DENTALE PRÄZISION

NT-Preform® abutment holders
(nt-trading)

Conditions

CAD:	CAM:	CORiTEC milling machine*:
3shape: Abutment Designer™	iCAM V4.6	140i 450i 750i 4820
exocad: implant module	iCAM V5	250i 550i 850i
		350i 650i 3020

(*wet processing required)

Material:

nt-trading: all blanks are made of titanium grade 5.
All blanks are available directly from nt-trading.

Abutment-Systeme:

COL-Serie compatible with	Conelog®
E-Serie compatible with	Noble Biocare™ Replace Select®
F-Serie compatible with	Noble Biocare™ Nobel Active®
H-Serie compatible with	Biomet 3i™ Certain®
I-Serie compatible with	Biomet 3i™ Osseotite®
K-Serie compatible with	Nobel Biocare™ Brånemark®
L-Serie compatible with	Straumann Bone Level®
N-Serie compatible with	Straumann SynOcta®
R-Serie compatible with	Zimmer Tapered Srew-Vent® BioHorizons® internal MIS® SEVEN
S-Serie compatible with	Astra Tech OsseoSpeed® HIOSSEN® OSSTEM TS®
T-Serie kompatibel zu	Dentsply-Friadent Frialit/Xive®

nt-trading NT-Preform® abutment holders

One-piece abutments in industrial quality? Our system solutions make it feasible. All you need is the respective starter kit from imes-icore that matches your machinery. You can then order more blanks directly from the manufacturer, nt-trading. In the design process, you design only the anatomically reduced form, and cut the individual abutment to the prefabricated, perfect fit interface.

- Short manufacturing times due to simultaneous processing of six blanks in a single operation
- Consistent precision and reproducibility for all standard implant systems
- Short manufacturing times due to simultaneous processing of six blanks in a single operation
- No special tools required

nt-trading
www.nt-trading.com

Tools:

Tool no. titanium	Diameter/ Geometry	Material	Max. material height	Item no. 3 mm shaft	Item no. 6 mm shaft
T1	3,0 mm, radius	CoCr/Ti	up to 15 mm	526018 3003	526011 3006
T2	2,0 mm, radius	CoCr/Ti	up to 15 mm	526018 2003	526011 2006
T4	1,0 mm, radius	CoCr/Ti	up to 15 mm	526018 1003	526011 1006

Starter kit available!

Starter kit NT-Preform®, available with six preform abutments and all required accessories

Applikations-Kit

therapeutic splints

Conditions

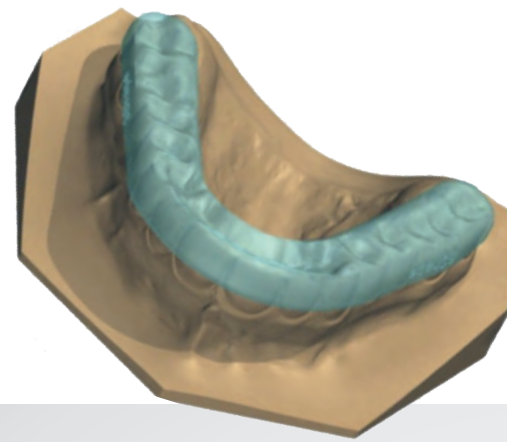| CAD:	CAM:	CORiTEC milling machine:			
3shape: Splint Designer™	iCAM V4.6	240i	250i	450i	850i
exocad: implant module	iCAM V5	245i dry	340i	550i	3020
		245i	350i	650i	4030M1
		250i dry	440i	750i	4820

Material:

A variety of materials can be used for the production of splints. Class I medicinal products are available for this purpose. High quality blanks are available from imes-icore.
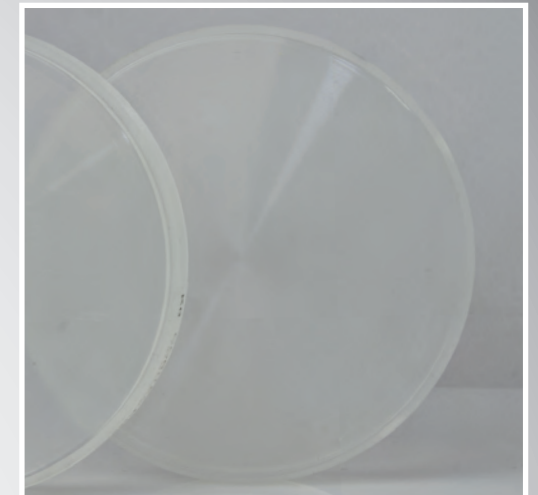
Material	Dimensions (mm)	Item no.
CORiTEC PMMA Discs transparent	98 x 20	525005 98209
innoBlanc® splint	98 x 15	525045 9815
innoBlanc® splint	98 x 20	525045 9820

Tools:

Occlusal splints are made of plastic materials. For that reason, our standard plastic cutters are used. Since occlusal splints are often produced in large numbers, the processing time plays an important role. To speed up the processing time, taking into account consistently high quality, special roughing tools with large diameters were developed for this application. With large tool diameters, the total processing time when roughing is greatly reduced.

Werkzeug Nr.	Durchmesser / Geometrie	Material	Max. material height	Item no. 3 mm shaft	Item no. 6 mm shaft
T31	3,0 mm, shaft, single tooth cutter	PMMA / plastics	up to 25 mm	526012 3003	-
T30	4,0 mm, shaft, single tooth cutter	PMMA / plastics	up to 25 mm	-	526012 4006
T11	2,5 mm, radius	PMMA / plastics	up to 25 mm	526004 2503	526004 2506
T12	1,0 mm, radius	PMMA / plastics	up to 25 mm	526004 1003	526004 1006
T15	0,6 mm, radius, conical	Zr / PMMA / Wachs	up to 25 mm	526016 0603	526019 0606

With the new CAD versions of the renowned manufacturers 3shape (Copenhagen, Denmark), and exocad (Darmstadt, Germany), for the first time it is possible to design therapeutic splints.

Depending on the software version to hand (contact us for information), concepts such as occlusal splints, bleaching trays etc. can be generated. In the future, the possibilities can be extended to other applications, such as orthodontic appliances and mouth guards.

The characteristic feature of the data generated by CAD is a fast and high-quality implementation of the designs. The preparation is intuitive, and adapted to the specific patient situation. A virtual articulator provides additional support. Important parameters, such as condylar path, Benett angle, and ISS depending on the digitalized antagonists can be easily implemented.

priti®crown
(pritidenta®)

Conditions

CAD:	CAM:	CORiTEC milling machine*:				
3shape: Dental System™	iCAM V4.6	140i	250i	450i	750i	4820
Premium	iCAM V5	240i	340i	550i	850i	
exocad: DentalCAD		245i	350i	650i	3020	

(*wet processing required)

Material:

Blocks made of microstructure feldspar VITA Mark II which has been tried and tested millions of times are offered directly from pritidenta® in the following sizes:

Incisors: Sizes and Shapes

Sizes: S, M, L, X
UJ forms: Q (square), R (round), T (trapezoid)
LJ shapes: one shape
Colors: 0M1, A1, A2, A3, A3, 5, B2, B3, C2 and D3

Molars: Sizes and Shapes

Sizes: S, M, L, X
Shapes: one shape
Colors: 0M1, A1, A2, A3, A3, 5, B2, B3, C2 und D3

priti®crown, the new esthetic dimension for CAD/CAM: esthetic, three-dimensional, functional

priti®crown is a real product innovation for the modern dentistry. The prefabricated, three-dimensional crown blanks are currently unique in the dental sector. The product has the potential to set a new standard in the field of CAD/CAM-fabricated restorations.

For the first time in dentistry, a three-dimensional crown blank shaped along the natural lines is available for the CAD/CAM manufacturing of fully ceramic restorations.

Highlights:

- Anatomically esthetic dentin/cutter color gradient
- Shape and function are modeled on the natural tooth
- The microstructure feldspar VITA Mark II, tried and tested millions of times
- The portfolio for incisors and molars covers a wide range of shapes, colors and sizes - suitable for virtually all applications
- The functional and esthetic design using CAD technology forms the basis for the grinding process
- Considerable time and cost savings compared to conventional methods
- Proposal, selection and adaptation of the perfect prefabricated crown from a tooth library integrated into the CAD software
- Individual completion through automatic adjustment of the CAM software
- The dental refinement of the CAM-fabricated restoration finalizes the priti®crown for esthetic dentures

Tools:

Tool no	Diameter/Geometry	Material	Item no. 3 mm shaft	Item no. 6 mm shaft
T21	2,5 mm, radius, diamond cutter	Glass ceramics	526005 2503	526005 2506
T22	1,0 mm, radius, diamond cutter	Glass ceramics	526005 1003	526005 1006
T23	0,6 mm, tapered, diamond cutter	Glass ceramics	526005 0603	526005 0606

Starter kit available!

Contains: Tools, material, pritidenta® priti®crown and glass ceramics adapter

pritidenta®

milling model cast in PEEK and Wax

Conditions

CAD:
3shape: Removable
        Partial Design
ModelCast V4.0

CAM:
iCAM V4.6
iCAM V5

CORiTEC milling machine:

240i	250i	450i	850i
245i dry	340i	550i	3020
245i	350i	650i	4030M1
250i dry	440i	750i	4820

Material:

The PEEK material has been used successfully for years in the medical industry. Its various advantages, such as repeatable sterilization, biocompatibility, and x-ray transparency also make it an outstanding material for dental applications.

Material	Dimensions (mm)	Item no.
innoBlanc PEEK	98 x 16 mm	525046 9816
innoBlanc PEEK	98 x 20 mm	525046 9820
innoBlanc PEEK	98 x 25 mm	525046 9825
CORiTEC Wax Disc	98 x 18 mm	525001 8418
CORiTEC Wax Disc	98 x 20 mm	525001 8420

Tools:

Tool no.	Diameter/ Geometry	Material	Max. material height	Item no. 3 mm shaft	Item no. 6 mm shaft
T11	2,5 mm, radius	PMMA / plastics	up to 25 mm	526004 2503	526004 2506
T12	1,0 mm, radius	PMMA / plastics	up to 25 mm	526004 1003	526004 1006
T15	0,6 mm, radius, conical	Zr / PMMA / Wachs	up to 25 mm	526016 0603	526019 0606

Milled PEEK model casting?

No problem with a complete solution from imes-icore.

The fully digital workflow ensures modelling in CAD Neutrum. The output is an open file format (.stl). Milling the restoration from the PEEK plastic (polyetheretherketone) is then highly recommendable.

The resulting dentures are also non-allergenic and very light, in contrast to other existing materials, such as CoCr or titanium.

Highlights:

• Non-allergenic
• Biocompatible
• Lightweight
• Metal-free
• Visually appealing

Applikations-Kit

grinding block materials

Conditions

CAD:	CAM:	CORiTEC milling machine[*]:				
3shape: Dental System™	iCAM V4.6	140i	250i	450i	750i	4820
Premium	iCAM V5	240i	340i	550i	850i	
exocad: DentalCAD		245i	350i	650i	3020	

(*wet processing required)

Material:

Grinded materials may consist of feldspar or glass ceramic. Further options include lithium disilicate and nano-composite. All materials are ground and wet-processed under continuous cooling. Blanks can be ordered directly from the manufacturer of the block materials..
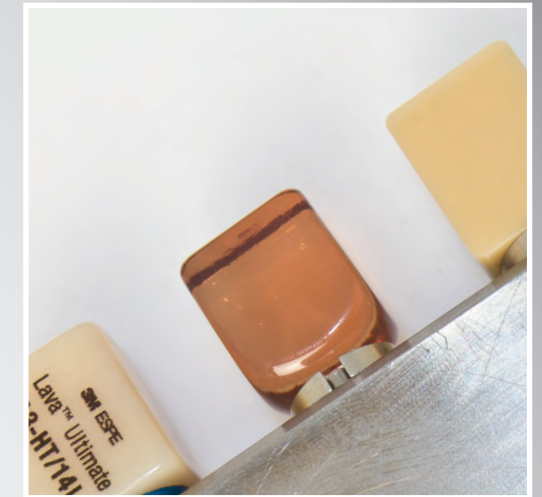
Tools:

Processing glass ceramics is significantly different from processing all other standard materials in dentistry. The processing is an abrasive process under continuous water flush; it is not a milling process. We therefore also speak of grinding tools. The abrasive tools consist of the basic body (pin) and the diamond coating. The diamond coating is applied to the pin in a galvanic process. Adhesion of the diamond grain to the pin plays a crucial role thereby. Only through a high quality galvanization process can an optimal connection between the grain and the body be achieved. In addition, the process must ensure the best possible homogeneity of the diamond surface. The homogeneity during the grinding process is essential for a high surface quality of the restorations, and for optimum service life of the grinding tools. The abrasive tools of imes-icore remain stable until the end of their life cycle. There is no reduction of the tool diameter, which eliminates a complex measurement of the tool geometries, or a complex tool dressing. Thus, imes-icore's abrasive tools are easy to use, and, due to the high level of development, feature the best possible tool life at an unbeatable price-performance ratio.

VITABLOCS®

imes-core has been cooperating with VITA since 2010. VITA is known as a supplier of high-quality products in the dental sector. Together with VITA, it was possible for us to process VITABLOCS® with imes-icore milling machines. The following products for processing are currently available for processing:

- VITABLOCS® Mark II
- VITABLOCS® TriLuxe
- VITABLOCS® TriLuxe Forte
- VITABLOCS® RealLife
- VITA ENAMIC®
- VITA SUPRINITY®

VITA

With **Lava™Ultimate**, the term chairside productivity takes on a whole new meaning. Thanks to the new Resin Nano Ceramic Technology (RNK), you can create solid, durable, and esthetically pleasing full-contour crowns in a 100 percent chairside workflow with Lava™ Ultimate.

3M ESPE Lava™ Materials Approved

CELTRA™ DUO CAD

One block, two options. The CELTRA™ DUO lithium silicate, enhanced with zirconium dioxide, represents a whole new class of materials:

- One ceramic block for all single-tooth restorations (inlays, onlays and crowns)
- Significantly stronger than glass ceramics
- The same strength as lithium disilicate in a much shorter time

DeguDent
A Dentsply Company

Highlights

- Production of all materials in the area of wet grinding (e.g. glass ceramics and lithium disilicate)
- Adapter also suitable for blocks of nano-composite
- Crowns, onlays, inlays, veneers, bridge frameworks, etc.

Tool no.	Diameter/Geometry	Type/Material	Item no. 3 mm shaft	Item no. 6 mm shaft
T21	2,5 mm radius, diamond cutter	Glass ceramics	526005 2503	526005 2506
T22	1,0 mm radius, diamond cutter	Glass ceramics	526005 1003	526005 1006
T23	0,6 mm, tapered, diamond cutter	Glass ceramics	526005 0603	526005 0606

Directly bolted implant-supported bridges and brackets/one-piece abutments

An Overview of the Benefits

- Scan bodies and matching libraries of all standard systems
- Maximum accuracy through newest scanner technologies and milling strategies
- Tension-free positioning even for large spans
- Cost-saving special tools

The CORiTEC system provides the preconditions to produce superstructures in combination with various implant systems. High accuracy of the machined operations is expected. The tasks are designed easily and fast using CAD, and passed to the CAM software. Tested and approved strategies allow you to mill implant bridges and brackets (without anti-rotation protection), and abutment systems (with anti-rotation protection) from different materials (such as Zr, Ti, CoCr), depending on the required application.

The following systems are currently supported:

Implantatsysteme (without anti-rotation protection)
Biomet 3i Osseotite® Certain®
Biomet 3i Osseotite®
Astratech OsseoSpeed®
Dentsply-Friadent Frialit/Xive®
Nobel Biocare Replace Nobel Active™
Nobel Biocare Brånemark®
Nobel Biocare Multi Unit
Nobel Biocare Replace Select®
Straumann BoneLevel®
Straumann SynOcta®

Abutmentsysteme (mit Verdrehschutz)
Biomet 3i Osseotite® Certain®
Astratech OsseoSpeed®
Dentsply-Friadent Frialit/Xive®
Nobel Biocare Replace Nobel Active™
Nobel Biocare Replace Select®
Straumann BoneLevel®
Zimmer Tapered ScrewVent®
Abutmentsysteme (lock) Innenhex
Biomet 3i Osseotite®
Nobel Biocare Brånemar®
Straumann SynOcta®

Zimmer Tapered ScrewVent®

Conditions

CAD:
3shape: Implant bars and bridges, Abutment Designer™
exocad: Bar module, Implant module

CAM:
iCAM V4.6
iCAM V5

CORiTEC milling machine:
350i | 550i | 650i
450i | 750i | 850i

Material:

The processing of implant-supported restorations does not depend on material. Thus, the restorations are made from the usual materials, such as Zr or Ti. The processing can also be done in all other available materials.

Material
CORiTEC Ti Disc
CORiTEC CoCr Disc
CORiTEC Zr Disc
CORiTEC PMMA Discs
CORiTEC Wax Disc

CORiTEC Materials from P. 38

Tools:

Special tool geometries are required for processing complex structures, such as abutment interfaces, screws seats, or attachment connection points. For example, in order to mill a screw channel with screw seat in detail, the so-called end mills are required. End mills are milling tools that are flat at the top, and do not have a corner radius. To mill special abutment interface geometries, tools with very small dimensions are often required as well. The special tools offered by imes-icore were developed according to the requirements of these complex geometries. The tools are universally suitable for all major materials used in the dental sector, such as CoCr, titanium, or zirconium dioxide. The tools are available in diameters of 1.5 mm and 0.5 mm, as radius end mills or shank end mills, respectively.

Tool no.	Diameter/ Geometry	Material	Max. material height	Item no. 3 mm shaft	Item no. 6 mm shaft
T3 / T8 / T16	1,5 mm, radius	Universal	up to 25 mm	526000 1503	526000 1506
T5 / T10 / T17	1,5 mm, shaft (long)	Universal	up to 25 mm	526001 1503	526001 1506
T5 / T10 / T17	1,5 mm, shaft, 4 blade cutter	Universal	up to 25 mm	-	526002 1506
T18	0,5 mm, radius	Universal	up to 25 mm	-	526000 0506
T19	0,5 mm, shaft	Universal	up to 25 mm	-	526001 0506

! In addition, the default cutters of the material are required.
Tools and materials from page 30

3M ESPE Lava™
Approved

3M ESPE Lava™ Materials Approved

Conditions

CAD:
3shape: Dental System
exocad: dentalCAD

CAM:
iCAM V4.6
iCAM V5
CAM: HyperDENT
von Follow-Me

CORiTEC milling machine:

240i	250i dry	350i	650i	3020
245i dry	250i	450i	750i	4030M1
245i	340i	550i	850i	4820

Material:

- Lava™ Zirkoniumdioxid
- Lava™ Wax
- Lava™ DVS
- Lava™ Plus
- Lava™ Ultimate
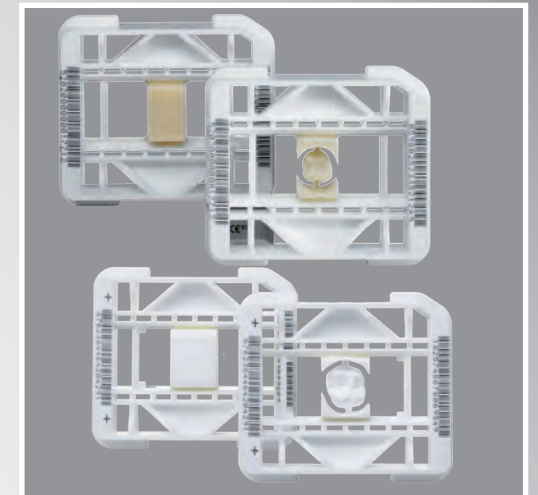
Tools:

The matching milling tools for the Lava™ materials are available through the distribution channels of 3M ESPE.

Tool no.	Diameter/Geometry	Typ/Material	Name Lava™
54	2,0 mm radius	Lava Zr	2,0 mm ZrO2 Radius Lava™ ,Lava™ Plus
55	2,0 mm radius	Lava Zr	2,0 mm ZrO2 Radius Lava™ , Lava™ Plus
56	1,0 mm radius	Lava Zr	1,0 mm ZrO2 Radius Lava™ , Lava™ Plus
59	0,5 mm radius	Lava Zr	0,5 mm ZrO2 Radius Lava™ , Lava™ Plus
70	0,5 mm radius	Lava Ultimate	0,5 mm Ultimate Radius
71	2,0 mm radius	Lava Ultimate	2,0 mm Ultimate Radius
72	2,0 mm radius	Lava Ultimate	2,0 mm Ultimate Radius
73	1,0 mm radius	Lava Ultimate	1,0 mm Ultimate Radius
74	2,0 mm radius	Lava Zr	2,0 mm ZrO2 Radius Lava Plus

In cooperation with 3M ESPE, selected imes-icore machine types have been certified by 3M ESPE for processing 3M ESPE Lava ™ material. The possibility of processing high-quality Lava ™ frames offers an option to extend the range of materials using imes-icore equipment.

Currently, the machine models CORiTEC 450i and CORiTEC 250i "3M ESPE Lava™ Approved" are certified. The various Lava™ materials can thus be produced with a special adapter.
The CAM software "HyperDENT" of Follow-Me ensures a consistently high milling quality. The CAM software HyperDENT is also certified by 3M ESPE, and together with the milling machines, provides high process safety and highly accurate cutting results.

Take advantage of this great option to add value to your system with these high-quality brand products.

Further information at www.imes-icore.de

Applikations-Kit

Baltic Denture System
by Merz Dental GmbH
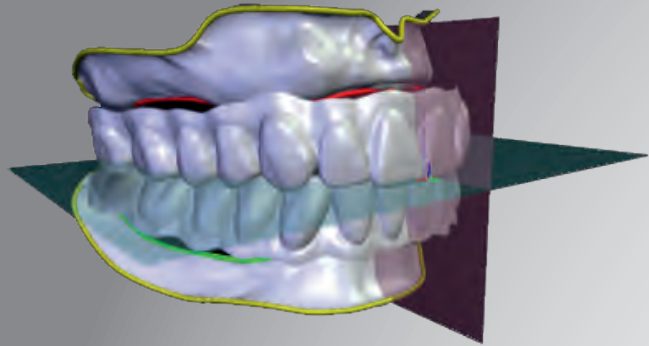
Conditions

CAD:
Merz Dental GmbH: BDCreator

CAM:
iCAM V4.6
iCAM V5
CAM: HyperDENT
von Follow-Me

CORiTEC milling machine:
350i
350i Loader

BDLoad:

- The BDLoad is a denture milling blank in which the dental arches are integrated in a functional, esthetic formation.
- The integrated formation concept of the dental arches follows the lingualized occlusion. Harmonic positioning of the incisors and molars in eugnathic occlusal position with optimal contact of the molars.
- The dental arch consists of Polystar® Selection EDITION incisors, and DeltaForm® molars of Merz Dental. The three-layered molar DeltaForm® impresses with its esthetic effect and abrasion resistance.
- The different tooth and dental arch sizes in the milling blank allow a patient-specific adaptation of the dental arch. The sizes S, M and L, and the dental arch variants narrow, medium and wide are available.
- Low residual monomer content

Tools:

Tool no.	Diameter/Geometry	Material	Max. material height
T31	3,0 mm, shaft, single tooth cutter	PMMA	bis 32 mm
T30	4,0 mm, shaft, single tooth cutter	PMMA	bis 32 mm
T34	2,0 mm, shaft	PMMA	bis 34 mm

The Baltic Denture System makes a comprehensive manufacturing process in the digital production of complete dentures possible. The Baltic Denture System consistently combines the lab digital manufacturing of complete dentures with reduced dental process steps. In an innovative workflow, checkbite and esthetics analysis in the dental office are optimized, and the information obtained is safely transferred to the digital lab system. BDLoad is the world's only "complete" denture blank.

The blank integrates function and esthetics. Merging individual patient data with the predefined function of the blank is carried out in the BDCreator design software. The CNC machining of BDLoad ensures precise fit and high material quality of the manufactured complete denture.

MERZ DENTAL

Information about tools and application
can be obtained directly from our sales department at:
Fon: +49 (0) 6672 898-228

Applikations-Kit

BioHPP elegance prefabs

the first individual physiological hybrid abutment based on PEEK

Conditions

CAD:
3shape: Dental System
exocad: dentalCAD

CAM:
iCAM V4.6
iCAM V5

CORiTEC milling machine:

140i	250i dry	440i	750i	4820
240i	250i	450i	850i	
245i dry	340i	550i	3020	
245i	350i	650i	4030M1	

Material:

- bredent SKY elegance
- Straumann® Bone Level™ RC™
- Straumann® Bone Leve™l NC™
- Astra® OsseoSpeed™ 4.5/ 5.0
- Astra® OsseoSpeed™ 3.5/ 4.0
- Nobel Active® RP™
- Nobel Active® NP™
- Nobel Branemark® NP™
- Nobel Branemark® RP™
- Nobel Branemark® WP™
- Nobel Replace™ NP
- Nobel Replace™ RP
- Nobel Replace™ WP
- Straumann® Tissue Level RN™
- Straumann® Tissue Level WN™
- Dentsply Friadent® Xive® 3.4
- Dentsply Friadent® Xive® 3.8
- Dentsply Friadent® Xive® 4.5
- Zimmer® Screw Vent® 3.5 MIS 3.5/4.5
- Zimmer® Screw Vent® 4.5
- Zimmer® Screw Vent® 5.7 MIS 5.7

- Biohorizons® 3.7
- Biohorizons® 4.25
- Biohorizons® 5.25
- Camlog® Screw™/ Rootline™ 3.8/ 4.3
- Camlog®Screw™/ Rootline™ 3.8/ 4.3
- Camlog® Screw™/ Rootline™ 3.8/ 4.3
- Camlog®Screw™/ Rootline™ 3.8/ 4.3
- Sweden Martina® Kohno™ 3.8
- Sweden Martina® Kohno™ 4.25
- Sweden Martina® Kohno™ 5.0
- 3i™/ Osseotite® 3.4
- 3i™/ Osseotite® 4.1
- 3i™/ Osseotite® 5.0
- 3i™/ Osseotite® Certain® 3.4/ 4.1/ 5.0

BioHPP is a ceramic-enhanced, partially crystalline polyetheretherketone (PEEK). PEEK, the main component of breCAM.BioHPP, has been successfully applied in human medicine for 30 years in implantology (for 20 years as spine interbodies and hip joint prostheses). Especially the ductile properties of BioHPP results in outstanding physiological comfort: the "off-peak" property (shock absorption). Here, the stress impact on the implant is attenuated and distributed with time delay. There is a homogeneous composite of titanium and BioHPP, which is completely gap-free, and has the best mechanical properties.

for long-term use
- BioHPP is the new reference for permanent dentures
- **Anti-allergenic**
- Metal, oxide, and monomer-free
- No allergic reactions and gum discoloration known up to date
- Perfect solution for people with allergies **Light weight/bone-like**
- Optimal biocompatibility and jaw integration
- No galvanic effects, no oxidation or metallic taste **Off-peak effect**
- BioHPP can absorb compression and torsion caused by chewing, and compensate them partially
- This results in a paradontium-like effect, and an increase in wearing comfort. **Tooth-like thermal conductivity**

- Comfortable wearing
- No differing perception for hot/cold food **Red/white esthetics**
- The white material color matches the tooth structure, and shows no dark gingival margins in the event of resorption of the surrounding soft tissue.**Low abrasion**
- BioHPP as a monolithic restoration protects the remaining dentition due to its low abrasion characteristics.

Tools:

Tool no.	Diameter/ Geometry	Type/ Material	Max. material height	Item no. 3 mm shaft	Item no. 6 mm shaft
T11	2,5 mm, radius	PMMA / plastics	bis 25 mm	526004 2503	526004 2506
T12	1,0 mm, radius	PMMA / plastics	bis 25 mm	526004 1003	526004 1006

Further information at www.imes-icore.de
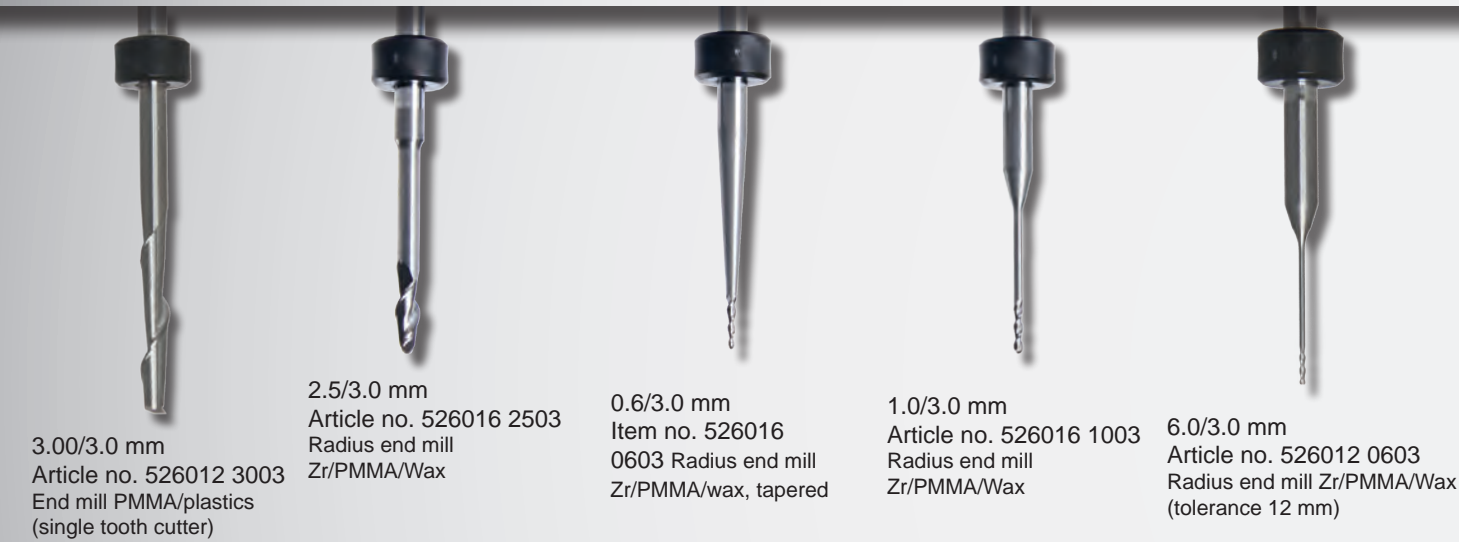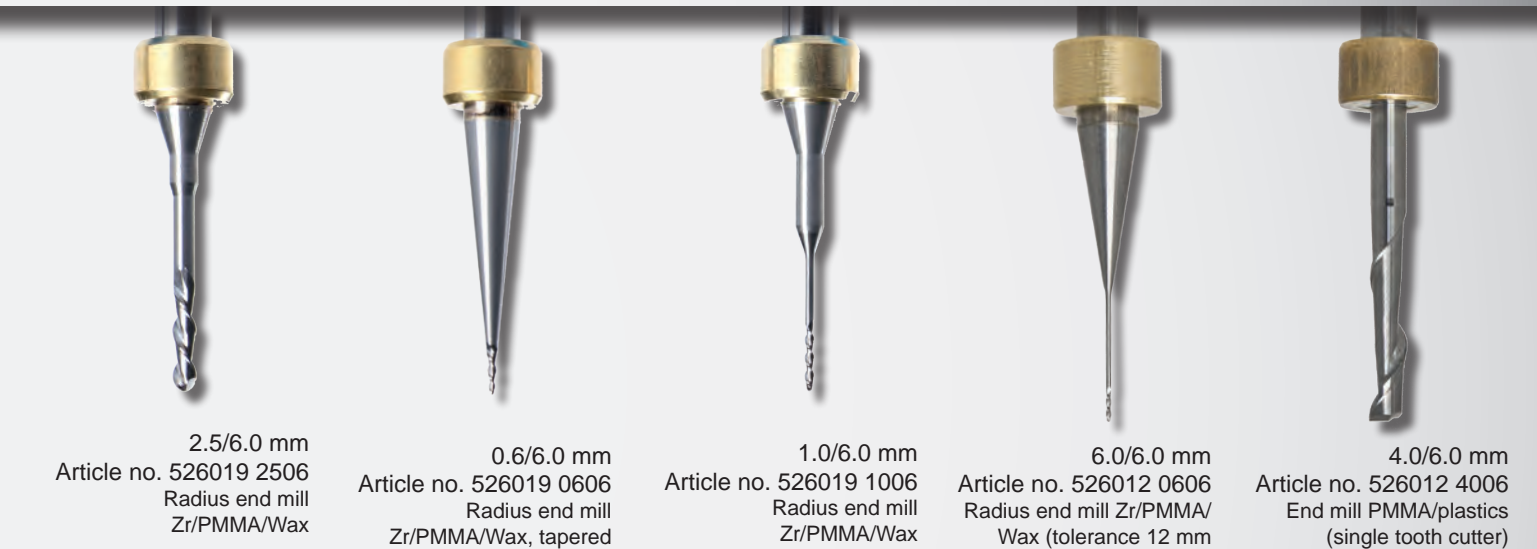
CORiTEC FräsTools

CORiTEC CoCr / Ti

1.5/3.0 mm
Article no. 526001 1503
Universal end mill,
twin-bladed cutter, long

3.0/3.0 mm
Article no. 526018 3003
Radius end mill, metal

1.5/3.0 mm
Article no. 526000 1503
Radius end mill, universal

1.0/3.0 mm
Article no. 526018 1003
Radius end mill, metal

2.0/3.0 mm
Article no. 526018 2003
Radius end mill, metal

CORiTEC CoCr / Ti

2.0/6.0 mm
Article no. 526011 2006
Radius end mill
metal, short

3.0/6.0 mm
Article no. 526011 3006
Radius end mill
metal, short

1,0/6,0 mm
Art.-Nr. 526011 1006
Radius end mill
metal, short

CORiTEC Universal (Usable for all dental Materials)

1,5/6,0 mm
Article no. 526001 1506
Universal end mill, twin-bladed
cutter, long

1,5/6,0 mm
Article no. 526001 1506
Radius end mill, universal

1,5/6,0 mm
Article no. 526002 1506
Universal end mills,
4 blade cutter, short

0.5/6.0 mm
Article no. 526001 0506
Universal end mill, twin-
bladed cutter

0.5/6.0 mm
Article no. 526000 0506
Radius end mill, universal

CORiTEC PMMA / nano-composite/wax

3.00/3.0 mm
Article no. 526012 3003
End mill PMMA/plastics
(single tooth cutter)

2.5/3.0 mm
Article no. 526016 2503
Radius end mill
Zr/PMMA/Wax

0.6/3.0 mm
Item no. 526016
0603 Radius end mill
Zr/PMMA/wax, tapered

1.0/3.0 mm
Article no. 526016 1003
Radius end mill
Zr/PMMA/Wax

6.0/3.0 mm
Article no. 526012 0603
Radius end mill Zr/PMMA/Wax
(tolerance 12 mm)

CORiTEC PMMA / nano-composite/wax

2.5/6.0 mm
Article no. 526019 2506
Radius end mill
Zr/PMMA/Wax

0.6/6.0 mm
Article no. 526019 0606
Radius end mill
Zr/PMMA/Wax, tapered

1.0/6.0 mm
Article no. 526019 1006
Radius end mill
Zr/PMMA/Wax

6.0/6.0 mm
Article no. 526012 0606
Radius end mill Zr/PMMA/
Wax (tolerance 12 mm

4.0/6.0 mm
Article no. 526012 4006
End mill PMMA/plastics
(single tooth cutter)

CORiTEC glass ceramics

2.5/3.0 mm
Article no. 526005 2503
Diamond grinding pin

1.0/3.0 mm
Article no. 526005 1003
Diamond grinding pin

0.6/3.0 mm
Article no. 526005 0603
Diamond grinding pin,
tapered

CORiTEC Zr / Al - diamond

2.5/3.0 mm
Article no. 526013 2503
Radius end mill Zr diamond

1.0/3.0 mm
Article no. 526013 1003
Radius end mill
Zr diamond

CORiTEC glass ceramics

2.5/6.0 mm
Article no. 526005 2506
Diamond grinding pin

1.0/6.0 mm
Article no. 526005 1006
Diamond grinding pin

0.6/6.0 mm
Article no. 526005 0606
Diamond grinding pin,
tapered

CORiTEC Zr / Al - diamond

2.5/6.0 mm
Article no. 526013 2506
Radius end mill
Zr diamond

1.0/6.0 mm
Article no. 526013 1006
Radius end mill
Zr diamond

More detailed information about tools in conjunction with Materials can be found on the following pages.

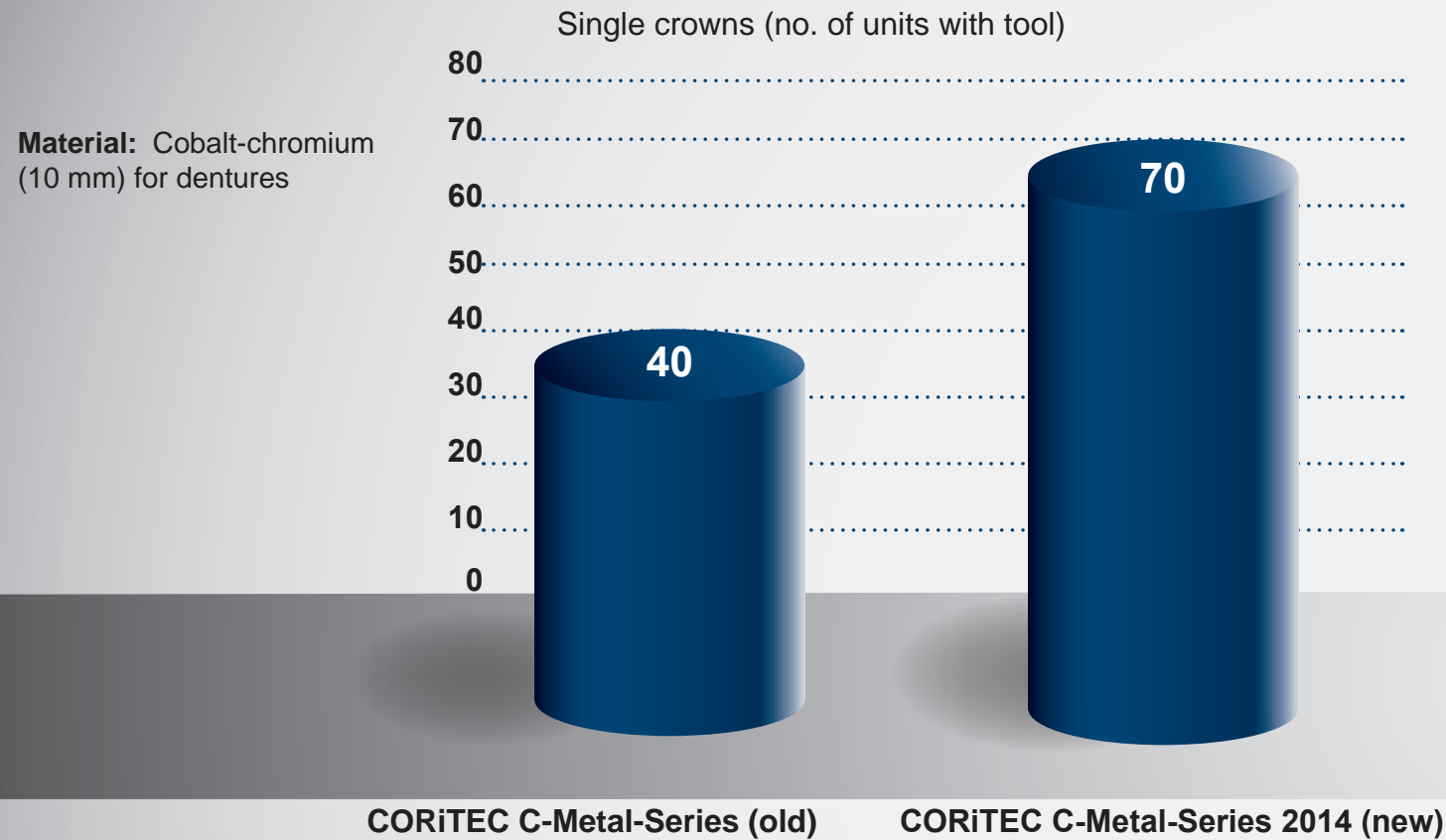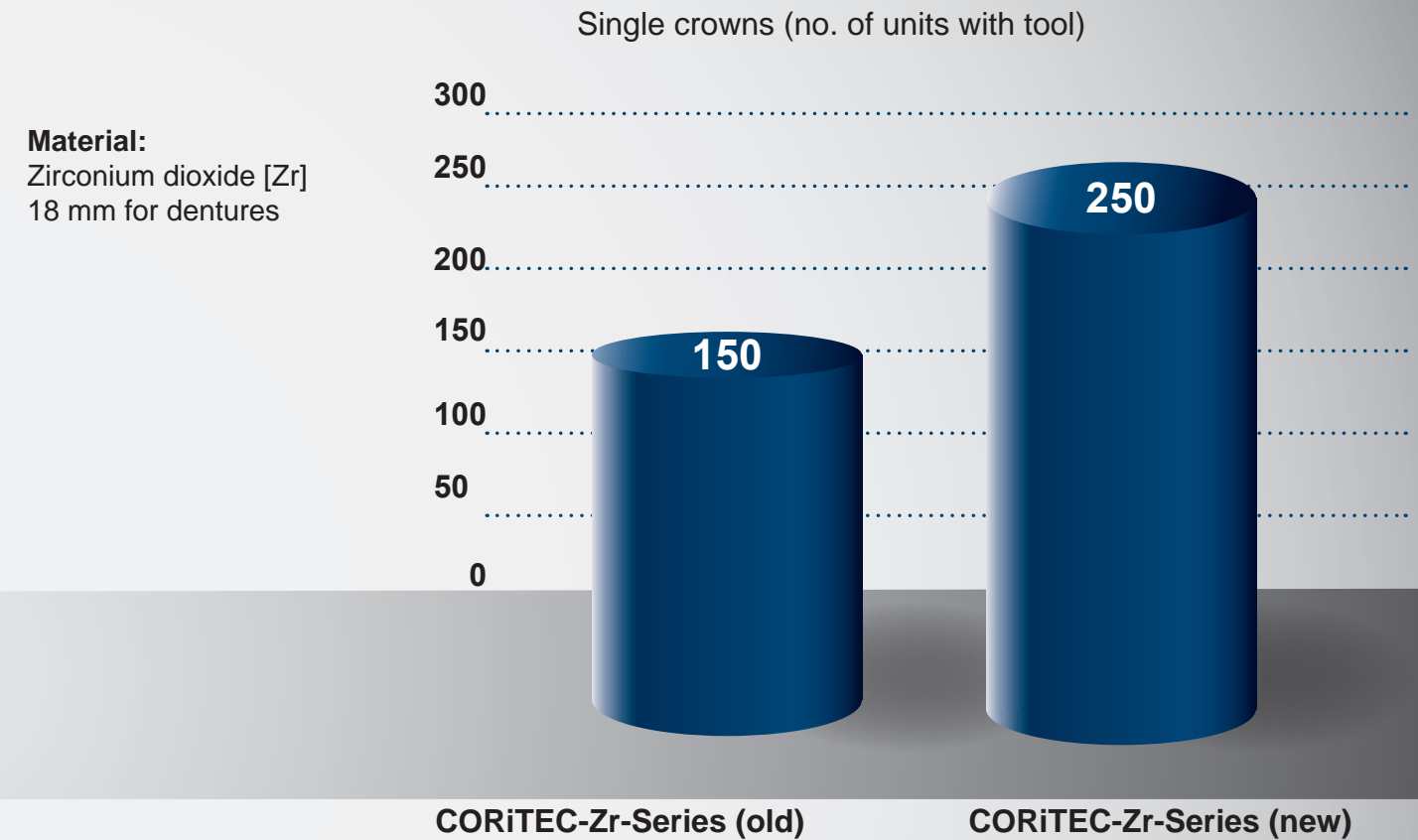# imes-icore tool technology

"We make the comparison!"

Comparison: CORiTEC C-Metal-Series (old)
vs. CORiTEC C-Metal-Series (new)

Single crowns (no. of units with tool)

Material: Cobalt-chromium (10 mm) for dentures

```
80
70
60        70
50
40
30   40
20
10
0
```

CORiTEC C-Metal-Series (old)   CORiTEC C-Metal-Series 2014 (new)

Result:

The new ball head mills CORiTEC C-Metal series (2014) has a 2-fold increase in tool life compared to the CORiTEC C-Metal series (old) (ball head mill with standard coating). (See for yourself the optimum quality of our milling tool!)

Comparison: CORiTEC-Zr-Series (old)vs.
CORiTEC-Zr-Series (new)

Single crowns (no. of units with tool)

Material:
Zirconium dioxide [Zr]
18 mm for dentures

```
300
250        250
200
150   150
100
50
0
```

CORiTEC-Zr-Series (old)   CORiTEC-Zr-Series (new)

Result:

5-fold longer tool life, compared to uncoated milling tools.
(See for yourself the optimum quality of our milling tools!)

**Milling tools for processing
CoCr, Ti, Ti alloys for dental applications**

This tool was developed specifically for the milling of hard-to-cut materials in dental applications (dentures). The tools are suitable to mill caps, crowns, bracket links, bridges, and other abutments.

Innovative geometry combined with a coating system matched to the application, smallest manufacturing tolerances, and 100% quality control during the manufacturing process offer the best cutting quality at maximum performance. The unanimously positive feedback from our customers confirm high process safety of the CORiTEC C-metal series in series applications.

The tool combines highly productive machining with excellent tool life and edge quality, while maintaining optimum fit.

**Milling tools for processing high-tech ceramics
zirconium dioxide ZrO2 (for dentures)**

This tool was developed specifically for the milling of high-tech ceramics.

Innovative geometry, smallest manufacturing tolerances, 100% quality control during the manufacturing process, and a new, extremely wear resistant diamond coating offer the best cutting quality at maximum performance.

The unanimously positive feedback from our customers confirm high process safety of the CORiTEC Zr series in series applications.

The tool combines highly productive machining with excellent tool life and edge quality.

CORiSHADE smile

Coloring liquid for all Zr blanks:

CORiTEC Zr / CORiTEC Zr transpa / CORiTEC Zr transpa smile

Unique results with the new CORiSHADE smile

Advantages:
- Uniformly colored caps
- Natural colors
- Short drying time
- Water-based, without acids
- Penetration depth of approx. 2.5 - 3 mm
- Easy to handle
- No opaquer, liner or similar necessary

CORiSHADE smile is used in particular for the coloring of transparent zirconium dioxide. Monolithic restorations from CORiTEC Zr transpa/transpa smile have thus no limits in terms of mechanical and optical properties. Moreover, all other zirconium dioxide blanks can also be colored.

For an esthetic effect, the fluids were perfectly matched to the CORiTEC Zr blanks.

In order for the liquid to optimally penetrate into the depth of the material, the manufacturing process is already set in such a way that the liquid can infiltrate through the "saturation principle". The color intensity thus no longer depends on the duration of the immersion time.

Dentin liquids:
By means of the dentin liquid, the entire color space of the 16 VITA colors is covered. The coloration can be achieved by dipping or brushing. Brushing can produce different color shades.

Incisal liquids:
Most customizations can be achieved by applying the incisal colors. Certain areas can therefore be discreetly highlighted or shaded.

Effect colors:
Moreover, highly concentrated colors: pink, gray and brown respectively) are available to create individual accents in the occlusal area.

Color by VITA®item number

Item	Item no.
A1	537050 5000
A2	537050 5001
A3	537050 5002
A3,5	537050 5003
A4	537050 5004
B1	537050 5005

Available in all 16 shades

B2	537050 5006	C3	537050 5011
B3	537050 5007	C4	537050 5012
B4	537050 5008	D2	537050 5013
C1	537050 5009	D3	537050 5014
C2	537050 5010	D4	537050 5015

Material for
CORiTEC machines

innoBlanc htp PMMA (polymethylmethacrylate)

Properties

- Residual monomer content 0.07% - 0.10%
- Cell vitality rate 96% - 98%
- Thermoplastic acrylic polymer based on methyl methacrylate
- Without toxic or allergenic substances
- Indicated for long-term deployment in the oral cavity
- Medically tested base material, processed with industrial injection molding process under highest quality control
- Color pigments with FDA (Food and Drug Administration/USA) approval
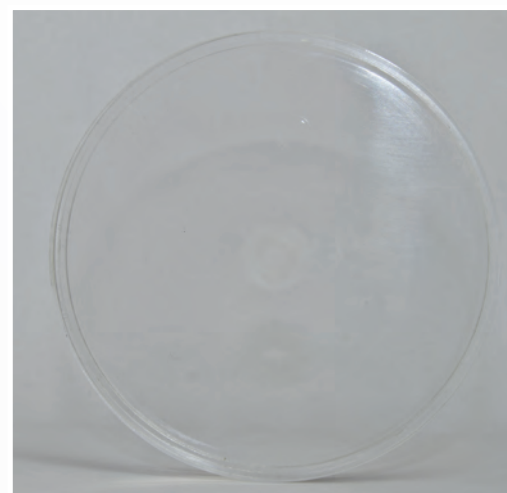
Range of applications

- Table tops
- Monolithic crowns
- Maryland bridges
- Long-term temporary restorations (> 2 pontics molars, max. 2 pontics incisors)
- Bridges (> 2 pontics molars, max. 2 pontics incisors)
- Multilayer technology
- Splints
- Telescope primary/secondary

innoBlanc htp pearl (~A1)	98 x 15	525040 9815
innoBlanc htp pearl (~A1)	98 x 20	525040 9820
innoBlanc htp sunny (~B2)	98 x 15	525041 9815
innoBlanc htp sunny (~B2)	98 x 20	525041 9820
innoBlanc htp aurora (~A3)	98 x 15	525042 9815
innoBlanc htp aurora (~A3)	98 x 20	525042 9820
innoBlanc htp maroon (~A4)	98 x 15	525043 9815
innoBlanc htp maroon (~A4)	98 x 20	525043 9820
innoBlanc htp grey-yellow (~A2)	98 x 15	525044 9815
innoBlanc htp grey-yellow (~A2)	98 x 20	525044 9820

innoBlanc splint (transparent)
PMMA (polymethylmethacrylate)

Properties

- Residual monomer content 0.19%
- Cell vitality rate 96% - 98%
- Thermoplastic acrylic polymer based on methyl methacrylate
- Without toxic or allergenic substances
- Indicated for long-term deployment in the oral cavity
- innoBlanc splint is available in transparent version; it is used for manufacturing of milled splints.

Range of applications

- Table tops
- Splints
- Drilling templates
- Guard splints

innoBlanc splint	98 x 15	525045 9815
innoBlanc splint	98 x 20	525045 9820

innoBlanc medical PEEK (polyetheretherketone)

Properties

- innoBlanc medical is a high-performance polymer.
- Excellent mechanical features
- Maximum biological compatibility
- Blanks are made of the perhaps most extensively medically documented PEEK Optima Juvora.
- Exceptional tribological properties (abrasive wear resistance)
- Virtually non-wearing

Range of applications

- For highly stressed primary and mesostructures, such as telescopic crowns, emergency crowns
- Clasp-impacted structures
- Perfectly antagonist-friendly, crack-proof, and highly biocompatible material with bone-like mechanical properties, as a future replacement for non-precious restorations
- innoBlanc medical is available in its default color (brown-beige)
- Caps
- Brackets
- Tertiary structures

innoBlanc PEEK	98x16	525046 9816
innoBlanc PEEK	98x20	525046 9820
innoBlanc PEEK	98x25	525046 9825

Tools for innoBlanc materials

When processing plastics such as PMMA or PEEK, suppression of heat generation during milling plays a crucial role. Processing these materials with standard cutting tools usually results in strong heating of the milling tools. The resulting melting of plastics has a detrimental effect on the surface quality and the fit of restorations. In addition, conventional tools have only a short service life.

The milling tools developed and offered by imes-icore have been optimized for the high demands posed by milling of plastics. The slide coating of the tools results a simple chip removal. As a result, optimum surface quality is achieved at maximum life expectancy. The milling tools for PMMA and wax are available in two different versions: as single-edged and double-edged tools. The single-edged tools are generally very good for all plastics and waxes. The tools are indispensable especially for the processing of high-performance plastics, such as PEEK or Lava™ Ultimate. The double-edged tools are suitable for processing of standard PMMA and wax. The double-edged tools are also suitable for processing of zirconium dioxide, and are therefore universally applicable.

Tool No.	Diameter/ Geometry	Material	Max. material height	Item no. 3 mm shaft	Item no. 6 mm shaft
T11	2,5 mm, radius	PMMA-Wax	up to 25 mm	526016 2503	526019 2506
T12	1,0 mm, radius	PMMA-Wax	up to 25 mm	526016 1003	526019 1006
T15	0,6 mm, radius, tapered shaft	Zr-Al-PMMA-Wax	up to 25 mm	526016 0603	526019 0606
T16	1,5 mm, radius	Universal	up to 25 mm	526000 1503	526000 1506
T17	1,5 mm, shaft (long), twin-bladed cutter	Universal	up to 25 mm	526001 1503	526001 1506
T18	0,5 mm, radius	Universal	up to 25 mm	-	526000 0506
T19	0,5 mm, shaft, twin-bladed cutter	Universal	up to 25 mm	-	526001 0506
T30	4,0 mm, shaft, single tooth cutter	PMMA/plastics	up to 25 mm	-	526012 4006
T31	3,0 mm, shaft, single tooth cutter	PMMA/plastics	up to 25 mm	526012 3003	-
T32	0,6 mm, radius	plastics	up to 25 mm	526012 0603	526012 0606
T33	0,3 mm, radius, conical	Zr/PMMA/Wachs	up to 25 mm	526016 0303	526019 0306

CORiTEC Zr ht+
(zirconium dioxide high transluzent)

Properties

- For highest demands on natural esthetics
- Zirconium dioxide redefines translucency
- Zirconium dioxide which is comparable to transparent lithium dioxide for the first time
- Zirconium dioxide with massively increased resistance in comparison to lithium dioxide

Range of applications

Highly transparent zirconium dioxide for the production of full-contour partial and single crowns, or for ceramic veneering of partial and single crowns, max. 3-unit bridges in the incisor and molar area, inlays/onlays, and veneers as dentures.

DxH [mm] / colors	Item no.
10	525016 9810
12	525016 9812
14	525016 9814
16	525016 9816
18	525016 9818
20	525016 9820
25	525016 9825

CORiTEC
Zr transpa Disc (zirconium dioxide transluzent)

Properties

- All the benefits of CORiTEC Zr Disc!
- High transparency
- Full biocompatibility
- Non-ageing
- Readily machinable

Range of applications

Covers all indications for dental restorations of up to 16 units.

DxH [mm] / colors	Item no.
98 x 10	525010 9810
98 x 12	525010 9812
98 x 14	525010 9814
98 x 16	525010 9816
98 x 18	525010 9818
98 x 20	525010 9820
98 x 25	525010 9825

CORiTEC Zr Disc
(zirconium dioxide)

Properties

- All-ceramic framework material, which will meet highest esthetic demands
- Large range of applications
- Excellent mechanical properties and unmatched strength values
- Readily machinable
- Perfect fit of all restorations, including long-span bridges
- Full biocompatibility
- Non-ageing

Range of applications

Covers all indications for dental restorations of up to 16 units.

DxH [mm] / colors	Item no.
98 x 10	525007 9810
98 x 12	525007 9812
98 x 14	525007 9814
98 x 16	525007 9816
98 x 18	525007 9818
98 x 20	525007 9820
98 x 25	525007 9825

CORiTEC Zr transpa Disc
(pre-colored zirconium dioxide)

light, medium, intense, low chromatic, high chromatic

Properties

- Pre-colored, highly-translucent material
- Affordable all-ceramic framework material, which will meet high esthetic demands
- Large range of applications
- Outstanding mechanical features and very good strength values
- Perfect fit of all restorations
- Full biocompatibility
- Non-ageing

Range of applications

Covers all indications for dental restorations of up to 16 units. Ideally suited for monolithic restorations.

Type/color	D x H (mm)	Item number	Type/color	D x H (mm)	Item number
Zr transpa light	98 x 10	525010 981001	Zr transpa intense	98 x 18	525010 981803
Zr transpa light	98 x 14	525010 981401	Zr transpa intense	98 x 20	525010 982003
Zr transpa light	98 x 18	525010 981801	Zr transpa intense	98 x 25	525010 982503
Zr transpa light	98 x 20	525010 982001	Zr transpa low chromatic	98 x 10	525010 981004
Zr transpa light	98 x 25	525010 982501	Zr transpa low chromatic	98 x 14	525010 981404
Zr transpa medium	98 x 10	525010 981002	Zr transpa low chromatic	98 x 18	525010 981804
Zr transpa medium	98 x 14	525010 981402	Zr transpa low chromatic	98 x 20	525010 982004
Zr transpa medium	98 x 18	525010 981802	Zr transpa low chromatic	98 x 25	525010 982504
Zr transpa medium	98 x 20	525010 982002	Zr transpa high chromatic	98 x 10	525010 981005
Zr transpa medium	98 x 25	525010 982502	Zr transpa high chromatic	98 x 14	525010 981405
Zr transpa intense	98 x 10	525010 981003	Zr transpa high chromatic	98 x 18	525010 981805
Zr transpa intense	98 x 14	525010 981403	Zr transpa high chromatic	98 x 20	525010 982005
			Zr transpa high chromatic	98 x 25	525010 982505

Zirconium dioxide tools

The specially designed cut geometry of the milling tools ensure best milling results, even with very thin margins. In zirconium oxide cutters, a distinction is made between diamond-coated and not diamond-coated milling tools. The high-quality diamond cutters have extremely long service life thanks to the perfectly designed diamond coating. The lower-priced non-diamond-coated cutting tools have a shorter service life compared to diamond-coated cutting tools. Due to the slide coating, these tools are also suitable for processing PMMA and wax. The milling tools for zirconium dioxide are available as radius end mills in the increments of 2.5 mm, 1.0 mm, 0.6 mm, and 0.3 mm in diameter. They are suitable for processing of blanks of up to 25 mm height. For the processing of complex structures, such as an abutment interface, milling tools with special geometries are also available.

| Tool no.	Diameter/ Geometry	Material	Max. material height	Item no. 3 mm shaft	Item no. 6 mm shaft
T13	2,5 mm, radius end mill	Zr / PMMA / Wachs	up to 25 mm	526016 2503	526019 2506
T14	1,0 mm, radius end mill	Zr / PMMA / Wachs	up to 25 mm	526016 1003	526019 1006
T15	0,6 mm, radius end mill, conical	Zr / PMMA / Wachs	up to 25 mm	526016 0603	526019 0606
T32	0,6 mm. radius (long), 12 mm clearance	Zr / PMMA / Wachs	up to 25 mm	526012 0603	526012 0606
T33	0,3 mm, radius end mill, conical	Zr / PMMA / Wachs	up to 25 mm	526016 0303	526019 0306
T13	2,5 mm, radius end mill	Zr diamond	up to 25 mm	526013 2503	526013 2506
T14	1,0 mm, radius end mill	Zr diamond	up to 25 mm	526013 1003	526013 1006

CORiTEC CoCr Disc
Non-precious alloy

Properties

- Outstanding mechanical features
- Very good thermal properties
- Perfect fit of all restorations, including long-span bridges
- Very good biocompatibility
- High corrosion resistance

Range of applications

- Single caps
- Single crowns
- Bridges up to 16 units, full bridges, and PFM technology
- Cone and telescopic technology
- Primary and secondary components
- Implant constructions
- Adhesive bridges
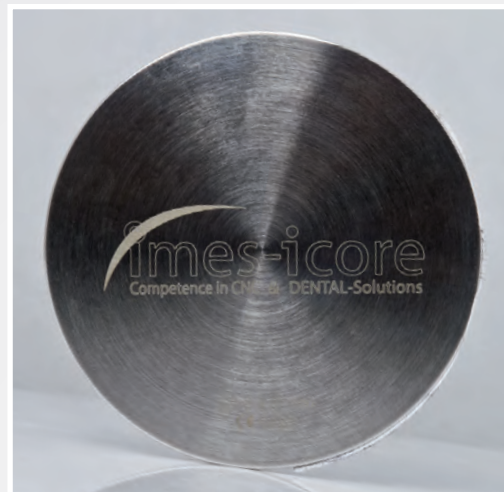
DxH [mm] / colors	Item no.
98 x 8 mm	525006 9808
98 x 10 mm	525006 9810
98 x 12 mm	525006 9812
98 x 15 mm	525006 9815
98 x 18 mm	525006 9818

CORiTEC Ti Disc

Pure titanium grade 2, pure titanium grade 4

Properties

- Excellent mechanical features
- Extremely high hardness and break resistance
- Perfect fit of all restorations, including long-span bridges
- Good corrosion resistance

Range of applications

- Single crowns in the incisor and molar area
- Spans of up to 3 units in the incisor area
- Spans of up to 3 units in the molar area
- Implant brackets

Grade	DxH [mm] / colors	Item no.
Grade 2	98 x 10 mm	525001 9810
Grade 2	98 x 15 mm	525001 9815
Grade 4	98 x 10 mm	525011 9810
Grade 4	98 x 15 mm	525011 9815

Tools for CoCr and Ti Disc

The special coating and the abrasion geometries are designed for heavy-duty use in milling CoCr or titanium. The double back clearance of the tools simplifies chip discharge during the milling process, thus ensuring low temperature development. Thus the tools achieve the longest possible tool life.

The milling tools for CoCr and Ti are available in two lengths. The short version is suitable for processing of blanks of up to 15 mm height. The long version is suitable for blanks from 16 mm to 20 mm. In general, when machining hard materials, it is always recommended to use tools as short as possible to ensure optimum mechanical milling properties. Optimal tool life is achieved thereby.

The processing of CoCr takes place usually in dry machining; processing of titanium must take place in wet machining.

The milling tools for CoCr and titanium are available as radius end mills in two different lengths, in the increments of 3.0 mm, 2.0 mm, 1.0 mm, and 0.6 mm in diameter.

For the processing of complex structures, such as an abutment interface, milling tools with special geometries are also available.

Tool no. titanium	Tool no. CoCr	Diameter/ Geometry	Material	Max. material height	Item no. 3 mm shaft	Item no. 6 mm shaft
T1	T6	3,0 mm, radius end mill	Metal	up to 15 mm	526018 3003	526011 3006
T2	T7	2,0 mm, radius end mill	Metal	up to 15 mm	526018 2003	526011 2006
T4	T9	1,0 mm, radius end mill	Metal	up to 15 mm	526018 1003	526011 1006
T26		3,0 mm, radius end mill (long)	Metal	up to 20 mm	-	526007 3006
T27		2,0 mm, radius end mill (long)	Metal	up to 20 mm	-	526007 2006
T29		1,0 mm, radius end mill (long)	Metal	up to 20 mm	-	526007 1006
T20		0,6 mm, radius end mill, conical	Metal	up to 15 mm	526003 0603	526003 0606

Further information at www.imes-icore.de

CORiTEC PMMA Disc

Properties

- Excellent mechanical features
- Very good cutting action
- Esthetic color effect
- High biocompatibility
- Perfect for allergy sufferers
- Easy and quick mechanical processing in the lab
- Very high profitability

Range of applications

Covers all indications for dental restorations of up to 16 units.

CORiTEC PMMA Discs D x H 98 mm x 20 mm

Color/type	
PMMA Disc A1	525005 98201
PMMA Disc A2	525005 98202
PMMA Disc A3	525005 98203
PMMA Disc A3,5	525005 9824
PMMA Disc A4	525005 9825
PMMA Disc B1	525005 98205
PMMA Disc B2	525005 9826
PMMA Disc B3	525005 9827
PMMA Disc B4	525005 9828
PMMA Disc C1	525005 9829
PMMA Disc C2	525005 98210
PMMA Disc C3	525005 98211
PMMA Disc C4	525005 98212
PMMA Disc D2	525005 98213
PMMA Disc D3	525005 98214
PMMA Disc D4	525005 98215

PMMA Disc BL1	525005 98216
PMMA Disc BL2	525005 98217
PMMA Disc BL3	525005 98218
PMMA Disc BL4	525005 98219
innoBlanc PEEK	525046 9816
innoBlanc PEEK	525046 9820
innoBlanc PEEK	525046 9825
innoBlanc htp pearl (~A1)	525040 9815
innoBlanc htp pearl (~A1)	525040 9820
innoBlanc htp sunny (~B2)	525041 9815
innoBlanc htp sunny (~B2)	525041 9820
innoBlanc htp aurora (~A3)	525042 9815
innoBlanc htp aurora (~A3)	525042 9820
innoBlanc htp maroon (~A4)	525043 9815
innoBlanc htp maroon (~A4)	525043 9820
innoBlanc htp grey-yellow (~A2)	525044 9815
innoBlanc htp grey-yellow (~A2)	525044 9820

CORiTEC Wax Disc
(Wax, gray)

Properties

- Very good cutting action
- Excellent operating characteristics, also in conjunction with modelling wax (lost mold)
- Residue-free burning for casting technology
- No swelling
- Speed capable
- mGray color for optimal contrast
- Very high profitability

Range of applications

CORiTEC wax disc is not intended for oral use. The material can be used to produce structures for crown and bridge models. These models can be used as lost molds in the casting technology.

DxH [mm] / colors	Item no.
98 x 18	525001 8418
98 x 20	525001 8420

Tools for Wachs, plastics and PMMA Discs

When processing plastics such as PMMA or PEEK, suppression of heat generation during milling plays a crucial role. Processing these materials with standard cutting tools usually results in strong heating of the milling tools. The resulting melting of plastics has a detrimental effect on the surface quality and the fit of restorations. In addition, conventional tools have only a short service life.

The milling tools developed and offered by imes-icore have been optimized for the high demands posed by milling of plastics. The slide coating of the tools results in a simple chip removal. As a result, optimum surface quality is achieved at maximum life expectancy.

The milling tools for PMMA and wax are available in two different versions: as single-edged and double-edged tools.

The single-edged tools are generally very good for all plastics and waxes. The tools are indispensable especially for the processing of high-performance plastics, such as PEEK or Lava™ Ultimate.
The double-edged tools are suitable for processing of standard PMMA and wax. The double-edged tools are also suitable for processing of zirconium dioxide, and are therefore universally applicable.

The milling tools for PMMA and wax are available as radius end mills in the increments of 2.5 mm, 1.0 mm, 0.6 mm, and 0.3 mm in diameter. They are suitable for processing of blanks of up to 25 mm height.

Tool no.	Diameter/ Geometry	Material	Max. material height	Item no. 3 mm shaft	Item no. 6 mm shaft
T11	2,5 mm, radius end mill, single tooth cutter	PMMA / plastics	up to 25 mm	526004 2503	526004 2506
T12	1,0 mm, radius end mill, single tooth cutter	PMMA / plastics	up to 25 mm	526004 1003	526004 1006
T11	2,5 mm, radius end mill	Zr / PMMA / Wachs	up to 25 mm	526016 2503	526019 2506
T12	1,0 mm, radius end mill	Zr / PMMA / Wachs	up to 25 mm	526016 1003	526019 1006
T15	0,6 mm, radius end mill, conical	Zr / PMMA / Wachs	up to 25 mm	526016 0603	526019 0606
T32	0,6 mm, radius end mill (long), 12 mm clearance	Zr / PMMA / Wachs	up to 25 mm	526012 0603	526012 0606
T33	0,3 mm, radius end mill, conical	Zr / PMMA / Wachs	up to 25 mm	526016 0303	526019 0306

Would you like to learn more about the and the capabilities of imes-icore Dental Systems?

Visit our plant in Eiterfeld, and learn more about our CAD/CAM systems and their capabilities.

CORiTEC model disc ivory (PU)

Properties

- Very high profitability
- Very good machinability
- Stable edges
- Optimal handling of the pull-off forces in CAM

Range of applications

A special plastic blank adapted to the requirements for dental model materials is made available.

DxH [mm] / colors	Item no.
98 x 15	525013 9815
98 x 20	525013 9820
98 x 25	525013 9825

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Tools for model disc

Models are made usually of plastic materials. For that reason, our standard plastic cutters are used. Since models are often produced in large numbers, the processing time plays an important role. To speed up the processing time, taking into account consistently high quality, special roughing tools with large diameters were developed for this application. With large tool diameters, the total processing time when roughing is greatly reduced.

These milling tools are single-edged end mills. For machines with 3 mm pliers, the tool with a diameter of 3 mm is available. For machines with 6 mm pliers, the tool with a diameter of 4 mm is available.

Tool no.	Diameter/ Geometry	Material	Max. material height	Item no. 3 mm shaft	Item no. 6 mm shaft
T31	3,0 mm (shaft), end mill, single tooth cutter	PMMA/plastics	up to 25 mm	526012 3003	-
T30	4,0 mm, shank end mill, single tooth cutter	PMMA/plastics	up to 25 mm	-	526012 4006
T11	2,5 mm, radius end mill	PMMA / plastics	up to 25 mm	526004 2503	526004 2506
T12	1,0 mm, radius end mill, single tooth cutter	PMMA/plastics	up to 25 mm	526004 1003	526004 1006
T32	0,6 mm, radius end mill (long), 12 mm clearance	Zr / PMMA / Wachs	up to 25 mm	526012 0603	526012 0606

Further information can be found at:

www.imes-icore.de

CORiTEC

Dental CAD/CAM-Systems

Further information at www.imes-icore.de