imes-icore
Competence in CNC & DENTAL-Solutions

The new generation of
CAD/CAM systems and technologies
2015

imes-icore
Quality
Made in Germany

Experience the possibilities
of our flexible CAD/CAM systems

CORiTEC machine portfolio

The new generation of machines

established machine systems

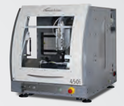













	CORiTEC 140i	CORiTEC 245i dry	CORiTEC 245i	CORiTEC 250i dry	CORiTEC 250i	CORiTEC 350i	CORiTEC 350i Loader	CORiTEC 650i	CORiTEC 850i	CORiTEC 440i	CORiTEC 450i	CORiTEC 450i Loader	CORiTEC 550i	CORiTEC 750i
Technical data:														
number of axes	4	4	4	5	5	5	5	5	5	4	5	5	5	5
number of tool positions	6	10	10	10	10	20	20	20	up to 99	8	14	14	16	16
$P_{max.}$ maximum spindle speed.	0,4 kW 60.000 rpm	0,4 kW 60.000 rpm	0,4 kW 60.000 rpm	0,4 kW 60.000 rpm	0,4 kW 60.000 rpm	1 kW 60.000 rpm	1 kW 60.000 rpm	3,2 kW 60.000 rpm	3,6 kW 42.000 rpm	1 kW 60.000 rpm	1 kW 60.000 rpm	1 kW 60.000 rpm	1,6 kW 80.000 rpm	1,6 kW 80.000 rpm
axle drives	microstep drives	microstep drives	microstep drives	microstep drives	microstep drives	servo drives	servo drives	Servo & Linearantriebe	Linear & Torqueantriebe	servo drives	servo drives	servo drives	servo drives	servo and linear drives
tool change / number of blank holder	manual 1-3-times	manual once	manual once	manual once	manual once	manual once	automatic up to 12-times	automatic up to 12-times	automatic up to 60-times	manual 2-times	manual once	automatic up to 20-times	manual 2-times	manual 4-times
dry processing	++	++	++	++	++	++	++	++	++	++	++	++	++	++
wet processing	++	-	++	-	++	++	++	++	++	-	++	++	++	++
blank processing 98 / 98,5mm	-	++	++	++	++	++	++	++	++	++	++	++	++	++
block processing (CAD / CAM blocks)	++	+**	++	+**	++	++	++	++	++	+**	++	++	++	++
Materials														
zirconium oxide / aluminium oxide	+	++	++	++	++	++	++	++	++	++	++	++	++	++
PMMA / resins / PEEK /composite / wax	++	++	++	++	++	++	++	++	++	++	++	++	++	++
glass ceramics / hybrid ceramics	++	-	++	-	++	++	++	++	++	-	++	++	++	++
sintered metal	-	++	++	++	++	++	++	++	++	++	++	++	++	++
chromium cobalt	-	-	-	-	-	+	+	++	++	+	+	+	++	++
titanium	+*	-	-	-	-	+	+	++	++	-	+	+	++	++
Applications														
copings /crowns/inlay/onlay	++	++	++	++	++	++	++	++	++	++	++	++	++	++
bridges up to 3 items	++	++	++	++	++	++	++	++	++	++	++	++	++	++
bridges up to 14 items	-	++	++	++	++	++	++	++	++	++	++	++	++	++
telescopes	+	++	++	++	++	++	++	++	++	++	++	++	++	++
therapeutic splints (bite splints)	-	+	+	++	++	++	++	++	++	+	++	++	++	++
tooth models	-	-	-	++	++	++	++	++	++	-	++	++	++	++
model cast	-	+	+	++	++	++	++	++	++	+	++	++	++	++
abutments on titanium adhesive basis	+	++	++	++	++	++	++	++	++	++	++	++	++	++
prefabricated abutments of Ti /CoCr	+	-	-	-	-	++	++	++	++	-	++	++	++	++
one-piece abutments (Zr, resins)	+	+	+	+	+	++	++	++	++	++	++	++	++	++
one-piece abutments (CoCr, titanium)	-	-	-	-	-	+	+	++	++	+***	+	+	++	++
barr structures / one-piece abutment bridges on implants	-	-	-	-	-	+	+	++	++	-	+	+	++	++

Key ++ ideally suitable + suitable - not available * option to use prefabricated abutments with Medentika adapter ** only for dry processing , e.g. Lava Ultimate *** only for Co Cr

imes-icore distributors **Worldwide**

These points on the map represent imes-icore distributors.
Find out more about our distributors worldwide on our web page.

www.imes-icore.de

Dental-Vertretungen Industrie-Vertretungen

A strong network

As a customer, you will benefit from the imes-icore worldwide distribution network.
We constantly expand and extend the availability of contact persons and support staff.

Find out more about our distribution system at www.imes-icore.de

imes-icore
Competence in CNC & DENTAL-Solutions

Innovation for the future

Our long-standing cooperation with renowned partners in the dental industry results in synergies in the production, development and functionality of dental CAD/CAM systems.

Partners are also of great importance in the development of applications, and upgrades for existing and newly developed machine systems. These partnerships provide our customers with

“Innovative and future-proof solutions
for CAD/CAM systems”.

Partnerships

pritidenta
3shape
bredent group
MERZ DENTAL
VITA
DeguDent A Dentsply Company
3M ESPE
MEDENTIKA GmbH DENTALE PRÄZISION
nt-trading www.nt-trading.com
exocad GmbH
core 3d centres

and many more ...

At imes-icore GmbH, the name says it all:

Competence in CNC & DENTAL solutions

The abbreviation imes for “**i**ntegrated **m**echanics, **e**lectronics, **s**oftware” implies our focus in Eiterfeld: We focus on ready-to-use system solutions to meet requirements of customers in handicrafts, education and industry. The abbreviation icore stands for “integrated dental solutions” for the dental industry.

imes-icore combines all the know-how in the development, production, sales and service of complete CNC machine systems with all required additional components and CAD/CAM applications.

Cutting, separating material and assembling processes are offered in the global market in the form of “CNC systems from a single source”. The machine systems with the processing sizes of approx. 150 mm x 50mm up to approx. 3000 mm x 6000 mm (other sizes available on request) find their international market mainly in general:

- Cutting technology (milling of hard metals, light metals, plastics, wood, styrofoam, ceramics, etc.)
- CNC Technology (separation in the water jet cutting process or laser cutting process)
- Medical technology (CAD/CAM systems for dental and orthopaedic technology)
- Reconstructive procedures (additive manufacture of components by melting wire and powder)

imes-icore GmbH offers the customer from the beginning a complete solution proposal for the task to be realized, through expert advice or a demonstration. After acceptance and delivery of a CNC machine system, corresponding training and support of the customer and the machine system is guaranteed by the specialist personnel in the after-sales service. Short response times for any inquiries or service operations also safeguard multi-layered industrial operations.

The outstanding advantages of imes-icore CNC systems are their modular structure, open interfaces, and flexibility for applicative adjustments they achieve. In this way, customer requirements can be met very quickly, and at a good price/performance ratio. The CNC systems are supplied as complete solutions, which can also be easily retrofitted and expanded with additional modular components and additional functions.

The corporate objective of imes-icore GmbH is to continually develop and improve the user-oriented features of different CNC machine systems. The system will be therefore flexible in the future, and up to date technologically at all times, to be able to meet the requirements with a coordinated system.

Eiterfeld Plant 1

Eiterfeld Plant 2

Eichenzell Plant

Berlin Plant

Dermbach Plant

Part of a **strong** group!

imes-icore
Quality
Made in Germany

The imes-icore GmbH is a company of the internationally active isel Group.

Launched in 1972 as “isert-electronik”, and later renamed to isel Group, the imes-icore GmbH has gained a reputation with sophisticated CNC solutions. True to the motto of the isel Group: “from components to systems”, the imes-icore GmbH is specialized in the field of CNC machine systems, and has thus been established as an independent pillar of the isel Group.

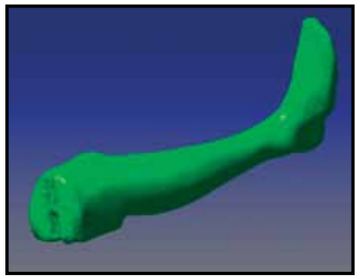
Fields of application of CNC machines in sophisticated medical technology

imes-icore produces cross-industry solutions for industry and medicine. Our customers will benefit from this. Continuous availability of spare parts ensures a long-term and smooth production process.

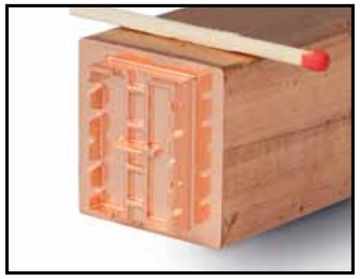
Service personnel is permanently working for you, and developing new technologies. Synergies arising from the expertise in the medical field and manufacturing of industrial systems will benefit you as an **imes-icore** customer.

These include, for example, the compact design of our machines, or the processing of new materials, such as ceramics, titanium, composite materials, and many more. Thus, we use e.g. the granite tone as an optimal basis structure of the machine kinematics. This is reflected in the quality and stability of our machines.

Orthopedics



Medical systems



Research

Thousands of satisfied customers prove us right

- **imes-icore**
- **Quality**
- **Made in Germany**

Quality management and certifications

imes-icore machines are produced in our factory in Eiterfeld (Hesse), where our highly qualified staff works at the highest precision level. The **imes-icore** machines are constantly reviewed from planning to construction by our in-house quality management. Each of our machines is manufactured to order. Thus, each machine already has its future owner. This feature reminds us again and again about our *promise*.

We manufacture German engineering art, because imes-icore stands for:

Excellence in dental solutions

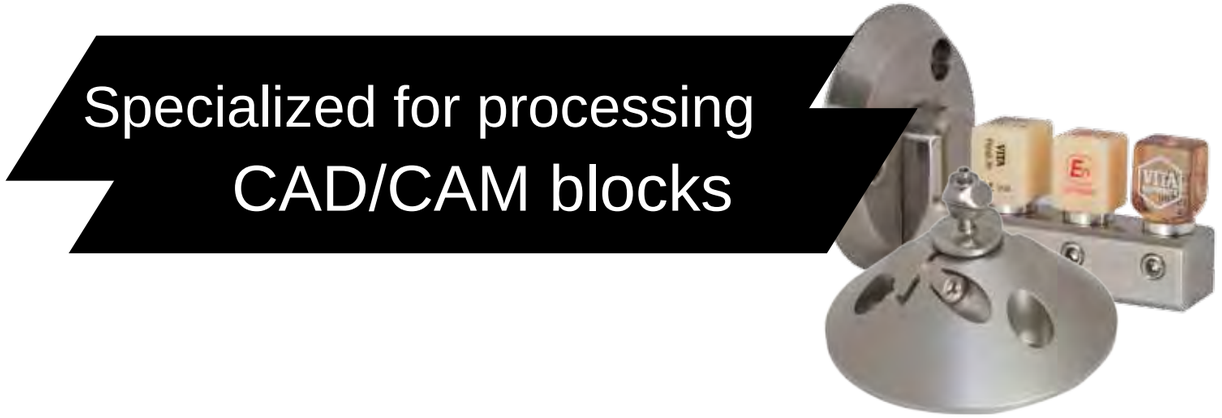
Qualitätsmanagement DQS MED ISO 13485 und ISO 9001

imes-icore is certified acc. to:
EN ISO 13485-2003 + AC 2009
ISO 9001:2008

CONTENTS

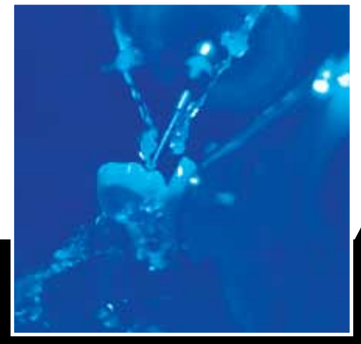
CORiTEC 140i

Practical solution for
practice lab



Technical highlights

- Attractive price-performance ratio ensures cost-effectiveness, and thus very short payback time
- Processing all standard CAD/CAM blocks, such as glass ceramics, lithium disilicate, or feldspars
- Production of prefabricated abutments
- Multi-adapter with up to three blocks
- Integrated wet and dry processing
- Automatic, 6-fold tool changer with tool management
- Tool runtime control/breakage control
- Highest precision through high-frequency spindle with up to 60,000 rpm
- 4-axis machining of material blocks (with undercut detection)
- Flexible adapter system allows the use of different CAD/CAM block systems
- Incl. control PC with Windows 7/8



High precision

through integrated temperature compensation!

The **CORiTEC 140i** machine system is perfectly suited for everyday use for grinding virtually all block materials available on the market. The machine can produce restorations directly, in combination with an intraoral scanner.

Also, the system is often used as a special machine in labs and milling centers for special wet processing of a wide variety of block materials. The stable industrial design of the machine makes processing in the highest quality possible - even the production of prefabricated abutment.

Technical specifications

Number of axles and machining type	4 axes, simultaneous machining
Max. tilt angle of the rotary axis	360° processing possible
Wet processing	Integrated
Spindle max. / $P_{max\sim}$	60,000 rpm / 0,4 kW
Axle drives	Microstep motors
Tool fitting	3 mm shaft
Tool changer	6-fold
Workpiece changer	Manual / 1-way and 3-way adapter possible / block processing
Weight	55 kg
width x depth x height	430x528x365 mm
Mains voltage / frequency / power	100V-240 V / 50/60 Hz / 800 W
Compressed air supply	6-9 bar constant supply, 50 litres/minute
Materials	Prefabricated abutment, zirconium dioxide, aluminium oxide, PMMA, plastics, composites, wax, glass ceramics, hybrid ceramics
Compatibility	CAD/CAM blocks (1-fold and 3-fold adapter), Medentika PreFace® abutments

CORiTEC 245i/245i dry

Optimal price/performance ratio

GRANIT base

The CORiTEC 245i and CORiTEC 245i dry machine systems establish your productive entry into dental CAD/CAM manufacturing. Also, these systems are suitable for application as complementary systems in larger labs and milling centers.

Thanks to the perfect price/performance ratio of the machines, most of all restorations can be produced inexpensively from e.g. zirconium dioxide or PMMA materials. All commercially available blanks with the 98 mm or 98.5 mm diameter can be used.

Also, processing of CAD/CAM blocks with a 3-fold adapter is possible; this is often used in wet processing for grinding materials.

Technical highlights

- 4-axis machining system with up to 30° axis orientation
- Tool runtime control/breakage control
- Integrated cooling circuit for cooling lubricant (only 245i)
- HF spindle up to 60,000 rpm
- High-resolution and high-performance micro-step controllers and motors on all axes
- Air purge system and cooling nozzles for wet processing are integrated in the spindle holder
- Extraction system to extract the resulting particulate matter
- Automatic compressed air and coolant monitoring
- For processing of zirconium dioxide, PMMA, wax, plastics, and grindable block materials
- Control software Remote DENTAL 2.0
- Incl. control PC with Windows 7/8

High precision through integrated temperature compensation!

Technical specifications

Number of axles and machining type	4 axes, simultaneous machining
Max. tilt angle of the rotary axis	A-axis +/- 30°
Wet processing	integrated only in CORiTEC 245i
Spindle max. / $P_{max\sim}$	60,000 rpm / 0,4 kW
Axle drives	Microstep motors
Tool fitting	3 mm shaft
Tool changer	10-fold
Workpiece changer	Manual
Weight	85 kg
width x depth x height	520x550x650 mm
Mains voltage / frequency / power	100 V-240 V / 50/60 Hz / 800 W
Compressed air supply	6-9 bar constant supply, only 50 litres/minute
Materials	Zirconium dioxide, aluminium oxide, PMMA, plastics, composites, wax, glass ceramics (only CORiTEC 245i), hybrid ceramics (only CORiTEC245i)
Compatibility	98 mm/98.5 mm blanks, CAD/CAM blocks (3-fold adapters), Lava frames

CORiTEC 250i/250i dry

The compact 5-axis Entry-level system

High precision through integrated temperature compensation!

GRANIT base

The machine systems CORiTEC 250i and 250i CORiTEC dry are the most widely used CAD/CAM entry level systems. Thanks to the 5-axis technology, these machines can also produce complex dentures with diverging stumps without rework. These systems are therefore ideal if a good price/performance ratio is in the foreground, with, nevertheless, very high flexibility of the machine system.

The CORiTEC 250i also features an option of wet processing. Wet processing takes place mostly in the processing of CAD/CAM blocks, and special plastic materials.

Technical highlights

- 5-axis machining system with up to 30° axis orientation
- Tool runtime control/breakage control
- Integrated cooling circuit for cooling lubricant (only CORiTEC 250i)
- HF spindle up to 60,000 rpm
- High-resolution and high-performance micro-step controllers and motors on all axes
- Air purge system and cooling nozzles for wet processing are integrated in the spindle holder
- Extraction system to extract the resulting particulate matter
- Automatic compressed air and coolant monitoring
- For processing of zirconium dioxide, PMMA, wax, plastics, and grindable block materials
- Control software Remote DENTAL 2.0
- Incl. control PC with Windows 7/8

Technical specifications

Number of axles and machining type	5 axes, simultaneous machining
Max. tilt angle of the rotary axis	A-axis +/- 30° / B-axis +/- 25°
Wet processing	Integrated only in CORiTEC 250i
Spindle max. / $P_{max~}$	60,000 rpm / 0,4 kW
Axle drives	Microstep motors
Tool fitting	3 mm shaft
Tool changer	10-fold
Workpiece changer	Manual
Weight	85 kg
width x depth x height	537x625x612 mm
Mains voltage / frequency / power	100 V-240 V / 50/60 Hz / 900 W
Compressed air supply	6-9 bar constant supply, only 50 litres/minute
Materials	Zirconium dioxide, aluminium oxide, PMMA, plastics, composites, wax. Glass ceramics and hybrid ceramics (only CORiTEC250i)
Compatibility	98 mm/98.5 mm blanks, CAD/CAM blocks (3-fold adapters), Lava frames

CORiTEC 350i

Ultimate all-in-one solution!

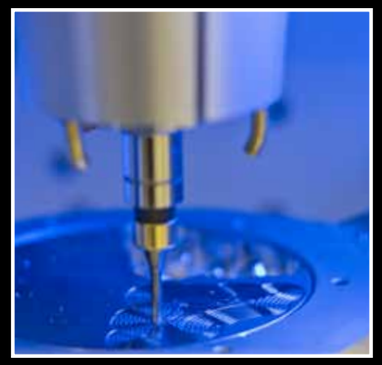
With the CORiTEC 350i processing system, a novel machine concept has been developed which meets all modern requirements for CAD/CAM processing. The processing of all relevant blank materials from CoCr, titanium, zirconium dioxide, plastics, block materials, and new future materials is thus possible with a single machine system, virtually without restrictions.

The modern and optimized machine kinematics, with high free angles of the 5 axes of over 30°, allows milling and grinding in wet and dry processing in high quality. This makes the system ideal for demanding laboratories as an all-rounder to produce all typical applications in your own lab, in high quality, using CAD/CAM technology.

The optional zero point clamping system allows for easy blank change by pressing a button.

Technical highlights

- 5-axis simultaneous processing
- Integrated wet and dry processing
- Optional zero point clamping system
- Processing of all important materials used in the dental industry, including metalworking
- Axis tilt angle up to 30°
- 20-fold tool changer
- HF spindle with up to 60,000 rpm
- Integrated control PC with touch screen
- Servomotors on all axes
- Chip protection of the tool changer
- Frontal machining of the workpiece possible (B-axis in 90 degree position)



NEW with touch operation

Technical specifications

Number of axles and machining type	5 axes, simultaneous machining
Tilt angle for machining with 98mm blank	A-axis +/- 30° / B-axis +/- 25°
Wet processing	Integrated
Spindle max. / $P_{max\sim}$	60,000 rpm / 1 kW
Axle drives	Servomotors
Tool fitting	6 mm shaft
Tool changer	20-fold with chip protection cover
Workpiece changer	Manual/optional: with zero point clamping system by pressing a button
Weight	180 kg
width x depth x height	758x790x857 mm
Mains voltage / frequency / power	100 V-240 V / 50/60 Hz / 2200 W
Compressed air supply	6-9 bar constant supply, 60 litres/minute
Materials	CoCr/NEM, titanium, zirconium dioxide, aluminium oxide, PMMA, plastics, composites, wax, glass ceramics, hybrid ceramics
Compatibility	98 mm/98.5 mm blanks, CAD/CAM blocks, nt-Trading pre-milled abutments, Medentika, Baltic Denture, PreFace®abutments, Lava frames

Flexible due to different mounting systems

CORiTEC 350i Loader

Revolution in automatic series production

Processing of up to 12 Blanks with automatic blank change

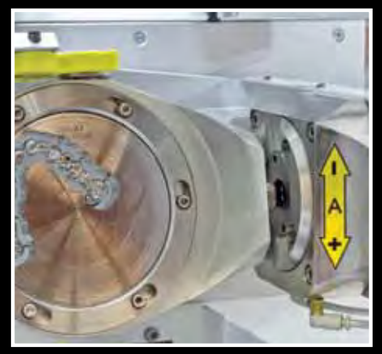
NEW Fully automated!

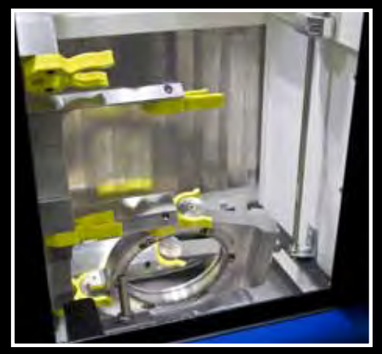
With the CORiTEC 350i and CORiTEC 350i Loader processing systems, a novel machine concept has been developed which now meets all modern requirements for CAD/CAM processing. The processing of all relevant blank materials from CoCr, titanium, zirconium dioxide, plastics, block materials, and new future materials is thus possible with a single machine system, virtually without restrictions. The modern and optimized machine kinematics, with high free angles of the 5 axes of over 30°, allows milling and grinding in wet and dry processing in high quality, for almost any application. This makes the system ideal for demanding labs as an all-rounder to produce all typical applications in your own lab, in high quality, using CAD/CAM technology.

In the CORiTEC 350i Loader system, the integrated technology of automated 12-fold material changers is trend-setting; it allows the machine to perform its work at full capacity and round the clock without supervision, in order to, for instance, mill high-volume, time-consuming applications, such as models, splints, or dentures.

Technical highlights

- 5-axis simultaneous processing
- Integrated wet and dry processing
- Processing of all important materials used in the dental industry, including metalworking
- Automatic blank changer with up to 12 blanks, including zero point clamping system
- 20-fold tool changer
- Servomotors on all axes
- Axis tilt angle up to 30°
- HF spindle up to 60,000 rpm
- Integrated control PC with touch screen
- Chip protection of the tool changer
- Frontal machining of the workpiece possible (B-axis in 90 degree position)





Technical specifications

Number of axles and machining type	5 axes, simultaneous machining
Tilt angle for machining with 98mm blank	A-axis +/- 30° / B-axis +/- 25°
Wet processing	Integrated
Spindle max. / $P_{max~}$	60,000 rpm / 1 kW
Axle drives	Servomotors
Tool fitting	6 mm shaft
Tool changer	20-fold with chip protection cover
Workpiece changer	12-fold fully automatic (standard 6-fold, extendable to 12-fold)
Weight	225 kg
width x depth x height	1058x790x857 mm
Mains voltage / frequency / power	100V-240 V / 50/60 Hz / 2300 W
Compressed air supply	6-9 bar constant supply, 60 litres/minute
Materials	CoCr/NEM, titanium, zirconium dioxide, aluminium oxide, PMMA, plastics, composites, wax, glass ceramics, hybrid ceramics
Compatibility	98 mm/98.5 mm blanks, CAD/CAM blocks, nt-Trading pre-milled abutments, Medentika, Baltic Denture, PreFace®abutments, Lava frames

CORiTEC 650i
CORiTEC 650i Loader

PREMIUM quality with future-oriented technology

Granite axis structure with highly dynamic linear & torque motors

NEW! with direct drive

Technical highlights

- Solid axis structure from polished natural granite for highly dynamic 5-axis simultaneous machining, and for high-precision milling results
- 3 linear axes with highly dynamic linear motor drives
- Massive granite rotating swivel unit as a 4th/5th Axis with torque motor drives
- Absolute, high-resolution measuring systems on all axes
- High-frequency spindle up to 50 000 rpm, 2.3 kW with HSK 25 tool holder
- 32-fold fully automatic tool changer.
- Integrated wet and dry machining for all materials and applications
- High-end control for fast control technology with touch screen operation
- Control software with order, processing, blanks, and tool management functions
- For high-quality standards of precision and speed in metalworking
- Optionally equipped with automatic workpiece changer/zero point clamping system (in preparation)

Available as fully-automatic-system with automatic material changer

In the area of PREMIUM machines for PREMIUM requirements, the new CORiTEC 650i and CORiTEC 650i Loader machine systems were developed. The systems have a very interesting price level and are equipped with high-quality industrial milling technologies, such as granite structure, direct drives, digital length measuring systems, and powerful main spindle. The machine concept impresses with its precise, vibration-free and dynamic motion sequences in the demanding and complex metal work. All other relevant materials can also be milled or ground in high quality with this machine system, in wet or dry machining.

The CORiTEC 650i loader includes a fully integrated automatic material changer. This enables operating the machine system at full capacity round the clock without supervision, while maintaining high precision. Thus, the machine system is ideally suited for large labs and milling centers, where these high quality standards and large quantities are at the forefront.

Technical specifications

Number of axles and machining type	5 axes, simultaneous machining
Tilt angle for machining with 98 mm blank	A-axis +/- 30° / B-axis +/- 25°
Wet processing	Integrated
Spindle max. / $P_{max\sim}$	50,000 rpm / 2.3 kW
Axle drives	Precision linear motors and torque motors, 0.5 µm resolution
Tool fitting	HSK 25
Tool changer	32-fold with chip protection cover
Workpiece changer	16-fold fully automatic
Weight	625 kg
width x depth x height	790x800x1800 mm
Mains voltage / frequency / power	240 V / 50/60 Hz / 2800 W
Compressed air supply	6-9 bar constant supply, 150 litres/minute
Materials	CoCr/NEM, titanium, zirconium dioxide, aluminium oxide, PMMA, plastics, composites, wax, glass ceramics, hybrid ceramics
Compatibility	98 mm/98.5 mm blanks, CAD/CAM blocks, nt-Trading pre-milled abutments, Medentika, Baltic Denture, PreFace®abutments, Lava frames

CORiTEC 850i

Full automation with handling robots for tools and blanks

The high-end product among the existing machine systems was implemented with the largest and most precise machine CORiTEC 850i. All installed components are designed for precision, durability and state-of-the-art technological level: granite structure, direct drives, digital length measuring systems, powerful HSK 32 spindle, zero point clamping system, and fully digital control system. The machine can be fitted with an automated 6-axis handling robot with workpiece magazine and zero point clamping system, to ensure a full automation of the system, and to enable future extensions.

The machine design masters the always accurate, vibration-free and dynamic motion sequences for all demanding and complex materials, so that very high surface quality and accuracy is achieved during milling and grinding, in wet or dry machining. This system is particularly suited for continuous use for the production of high-quality parts as required by milling centers.

Technical highlights

- Solid axis structure from polished natural granite for highly dynamic 5-axis simultaneous machining, and for high-precision milling results
- 3 linear axes with highly dynamic linear motor drives
- Massive granite rotating swivel unit as a 4th/5th Double bearing axis with torque motor drives
- EROWA - zero point clamping system for workpiece holder support
- Absolute, high-resolution measuring systems on all axes
- Powerful, vector-controlled high-frequency spindle (water-cooled) up to 42 000 rpm, 3.6 kW, HSK 32 tool holder. special oil pressure bearing of the spindle long service life
- 32-fold fully automatic tool changer for HSK 32 cone receptacle
- Integrated wet and dry machining for all materials and applications
- High-end control for fast control and processing technology with touch screen operation
- Control software with order, processing, blanks, and tool management functions.
- Especially for high-quality standards of precision and speed in metalworking

NEW!
massive construction

Fully automatic mode

In the form of a round the clock, fully automated high-tech solution with a separate 6-axis handling robot, with up to 80-fold workpiece magazine, and up to 40 additional HSK 32 tool stations.

Technical specifications

Number of axles and machining type	5 axes, simultaneous machining
Tilt angle for machining with 98 mm blank	A-axis +/- 30° / B-axis +/- 25°
Wet processing	Integrated
Spindle max. / P_{max-}	42,000 rpm / 3.6 kW water-cooled with oil-pressure bearing
Axle drives	Precision linear motors and torque motors, 0.5 µm resolution
Tool fitting	HSK 32
Tool changer	32-fold with chip protection cover
Workpiece changer	32-fold fully automatic with robots
Weight	1625 kg
width x depth x height	1790x1800x1800 mm
Mains voltage / frequency / power	380 V / 50/60 Hz / 8 kW
Compressed air supply	6-9 bar constant supply, 250 litres/minute
Materials	CoCr/NEM, titanium, zirconium dioxide, aluminium oxide, PMMA, plastics, composites, wax, glass ceramics, hybrid ceramics
Compatibility	98 mm/98.5 mm blanks, CAD/CAM blocks, nt-Trading pre-milled abutments, Medentika PreFace®abutments, Lava frames

Our proven machine systems

are, of course, still available

imes-icore
Made in
Germany

CORiTEC 440i One machine, double **output!**

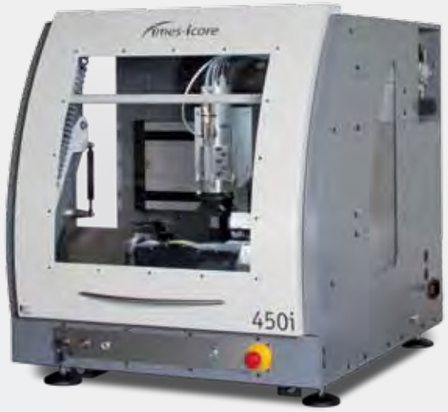
The reliable CORiTEC 440i machine system is perfect for labs and milling centers where the dry machining of e.g. zirconium dioxide in large quantities plays an important role. Moreover, the robust design and powerful main spindle make machining of CoCr easy.

Technical highlights

- 4-axis simultaneous machining
- Dry machining of chromium-cobalt, zirconium dioxide, aluminium oxide, PMMA, wax, plastics, composites
- Due to double blank fitting, two blanks can be used, which can be processed one after the other completely unattended, which corresponds to approximately 60 units in case of zirconium dioxide.
- 3-fold adapter for processing of CAD/CAM blocks can be integrated (e.g. for Lava Ultimate)
- Tilt angle of the A-axis up to +/- 20° to detect undercuts
- Automatic, 8-fold tool changer as direct changer
- Tool fitting in 6 mm shaft (3 mm shaft possible upon request)
- Powerful main spindle with 1 kW and up to 60,000 rpm
- Strong AC servomotors on all axes
- Reduced cleaning thanks to closed suction cup
- Incl. Control PC with control software Remote DENTAL 2.0
- 115 V/230 V version
- Compressed air consumption approx. 60 l/min (min. 6 bar)

CORiTEC 450i A classic with 5 axes!

The robust and flexible CORiTEC 450i machine system is perfect for labs that wish to process various materials in mixed operations. Thanks to the use of 5-axis machining of all relevant dental materials in wet and dry operation, this machine concept is ideally designed for these requirements. The CORiTEC 450i is one of the best-selling systems of imes-icore GmbH.



Technical highlights

- 5-axis simultaneous machining
- Dry and wet machining of chromium-cobalt, titanium, glass ceramics, zirconium dioxide, aluminium oxide, PMMA, wax, plastics, composites
- 98 mm/98.5 mm blank holder
- 3-fold adapter for processing of CAD/CAM blocks can be integrated (e.g. for Lava Ultimate, VITA blocks, or lithium disilicate)
- Tilt angle of the A-axis up to +/- 20°; B-axis up to +/- 15 degrees for 5-axis processing
- Automatic, 12-fold tool changer as direct changer
- Tool fitting in 6 mm or 3 mm shaft possible
- Powerful main spindle with 1 kW and up to 60,000 rpm
- Strong AC servomotors on all axes
- Strong 100:1 gears on A and B-axis for high rotary axes stability
- Control PC with control software Remote DENTAL 2.0
- 115 V/230 V version
- Compressed air consumption approx. 60 l/min (min. 6 bar)

CORiTEC 450i Loader “The unbeatable duo!”

Technical highlights

- CORiTEC 450i machine system with a blank changer expansion with up to 20 blank fittings.
- Blanks can be loaded and removed during machine operation.
- Smooth and fully automatic working process is possible
- Compact system as a desktop version

CORiTEC 550i Solid granite structure for highest precision!

CORiTEC 550i has been established for many years in the high-end machinery market. Due to the double blank fitting, the massive granite structure and powerful milling spindle, the system is particularly suitable for the machining of CoCr and titanium in large quantities. Thanks to the 5 axes and the high-quality control technology, the system is particularly suitable for complex structures, such as abutments or bracket constructions with implant attachment elements.

Technical highlights

- 5-axis simultaneous machining
- High-strength granite structure ensures accurate milling results
- Dry and wet machining of chromium-cobalt, titanium, glass ceramics, zirconium dioxide, aluminium oxide, PMMA, wax, plastics, composites
- 2-fold blank fitting for 98 mm/98.5 mm blanks. Thus, two blanks can be used, which can be successively processed completely unattended, which corresponds to approximately 70 units in case of CoCr.
- 3-fold adapter for processing of CAD/CAM blocks can be integrated (e.g. for Lava Ultimate, VITA blocks, or lithium disilicate)
- Tilt angle of the A-axis up to +/- 20°; B-axis up to +/- 15 degrees
- Automatic, 16-fold tool changer as direct changer
- Tool fitting in 6 mm
- Powerful main spindle with 1.6 kW and up to 80,000 rpm
- Strong AC servomotors on all axes
- Strong 100:1 gears on A and B-axis for high stability
- Integrated cooling system with pump in a stainless steel tank, with a filtering device
- Integrated control PC
- 230 V version
- Compressed air consumption approx. 160 l/min (min. 6 bar)

CORiTEC 750i Premium grade for milling centers

High-performance milling machine with high-strength granite structure, and maintenance-free precision digital linear actuators. The 4 blank fittings allow continuous processing with less set-up time. The machine system is ideal for large labs and milling centers with premium standards of quality, productivity and flexibility.

Technical highlights

- 5-axis simultaneous machining
- Dry and wet machining of chromium-cobalt, titanium, wax, glass ceramics, zirconium dioxide, PMMA, plastics, composites
- 4-fold blank fitting for 4 pieces of 98 mm/98.5 mm blanks (with CoCr, this corresponds to approx. 140 units)
- 3-fold adapter for processing of CAD/CAM blocks can be integrated (e.g. for Lava Ultimate, VITA blocks, or lithium disilicate)
- High strength, dampening granite structure made of solid, polished natural stone in precision industrial design
- Tilt angle of the A-axis up to +/- 20°; B-axis up to +/- 15 degrees
- Automatic, 16-fold tool changer as direct changer
- Tool fitting in 6 mm
- Powerful main spindle with 1.6 kW and up to 80,000 rpm
- Powerful, digital linear motor drives with integrated Heidenhain length measuring systems
- Integrated cooling system with pump in a stainless steel tank, with a filtering device.
- Industrial control PC, integrated on a Windows-basis
- Operating voltage: 3 Ph/400 V type
- Compressed air consumption at 7 bar: Air cooling: 180 l/min / water cooling: approx. 80 l/min

Applications and Functions

Astounding versatility

Model milling

Baumann system or model with removable stumps

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

Implant models

DIM analog of nt-trading

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, model production is quick and easy. Position and orientation definition takes place via the scan bodies. This process step can also be performed intraorally.

Abutment holders

Medentika PREFACE®

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 from the actual manufacturer. In the design process, you design and cut only the anatomically reduced form.

nt-trading nt-PREFORM®

One-piece abutments in industrial quality? Our system solutions make it feasible. All you need is the respective starter kit from imes-icore, matching 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.

For more information about the functions and features of the imes-icore machines, please see our current accessories booklet, or www.imes-icore.de

Learn more about applications and functions from our Accessories booklet

Prefabricated crowns

pritidenta priti®crown

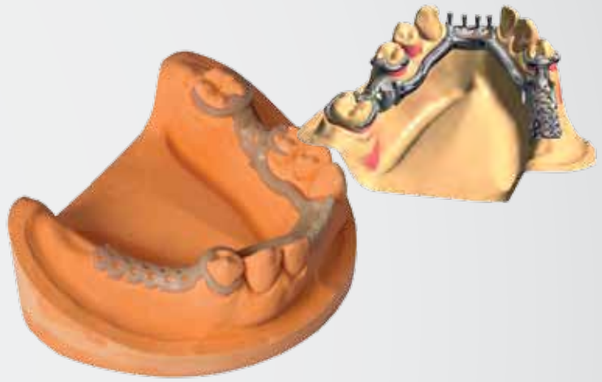
priti®crown is a real product innovation for modern dentistry. The prefabricated, three-dimensional crown blanks are currently unique in the dental sector. The product has the potential to set a new standard in the field of CAD/CAM-fabricated restorations.

Milling of model cast

Milled model casting? No problem with the end-to-end solution from imes-icore.

Fully digital workflow ensures modelling in CAD. The output is an open file format (stl). Milling the restoration from the PEEK plastic (polyetherketone) 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.



Grinding of block materials

e.g. Lava™ Ultimate

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

e.g. CELTRA™ DUO CAD

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

e.g. 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.

Applications and Functions

for imes-icore CORiTEC CAD/CAM systems

3M ESPE Lava Approved

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 machines.

Milling of pre-milled PEEK abutments

BioHPP is a ceramic-enhanced, partially crystalline polyetheretherketone (PEEK). The bonding forces of polymer chains are more effective when the chains are aligned in parallel. Such areas are called crystalline. 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).

Through hardening with ceramic fillers, the material properties were significantly improved (strength, abrasion and veneering properties), and thus specifically adapted and optimized to the needs and applications in dentistry.

Therapeutic splints

PMMA/inno Blanc splint

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.

Always the latest applications and functions

Implant-supported bridges and brackets/abutments

The following systems are currently supported:

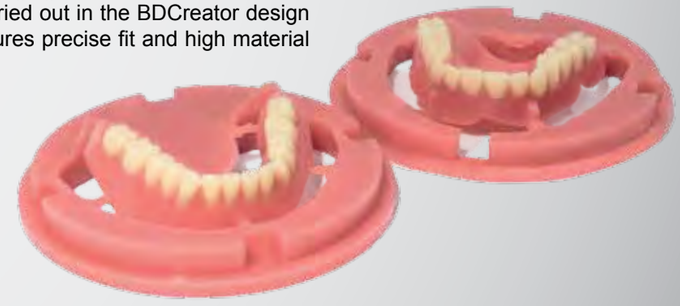
Implant systems (no lock)
Biomet 3i Osseotite® Certain®
Biomet 3i Osseotite®
Astratech OsseoSpeed®
Dentsply-Friadent Frialit/Xive®
Nobel Biocare Replace Nobel Active™
Nobel Biocare Brånemark®
Nobel Biocare Multi Unit
Nobel Biocare Replace Select®
Straumann BoneLevel®
Straumann SynOcta®
Zimmer Tapered ScrewVent®

Abutment systems (lock)
Biomet 3i Osseotite® Certain®
Astratech OsseoSpeed®
Dentsply-Friadent Frialit/Xive®
Straumann BoneLevel®
Zimmer Tapered ScrewVent®
Abutment systems (lock), internal hex
Biomet 3i Osseotite®
Nobel Biocare Brånemark®
Straumann SynOcta®
Nobel Biocare Replace Nobel Active™
Nobel Biocare Replace Select®

Milling of complete dentures

The Baltic Denture System is the first comprehensive manufacturing process in the digital production of complete dentures. 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 safely transferred to the digital lab system. BDLoad is the world's only "complete" denture blank.

The blank integrates function and esthetics. Merging the 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 complete denture.



Find more information about applications offered by our CAD/CAM systems in our

Accessories Booklet

www.imes-icore.de | Fon.+49 (0) 6672 - 898 228

CORiTEC iCAM V4.6

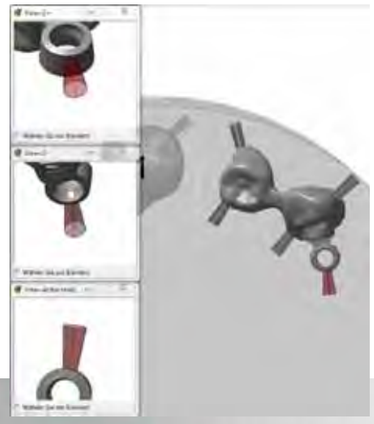
Unlimited **options** with **precision** with the **new iCAM V4.6!**

Optimal 5-axis
CAM software for beginners and professionals!

CORiTEC iCAM V4.6 is a prestigious 5-axis Profi-CAM system based on Windows 7/8, which has matured after many years of experience. Simple, reliable and fast operation makes iCAM V4.6 unique. The applied dental application software has been optimized for the automatic production of high-quality dental restorations.

It calculates the milling data in no time with optimized and safe milling strategies, based on ten years of dental CAD/CAM experience, for all common materials and dental structures. The user-friendly and clearly arranged interface, as well as many fully automated functions, ensure reliable and easy operation.

iCAM V4.6 guides beginners and advanced users automatically and safely through the entire milling program. Behind the dental user application, there is a fully industrial CAD/CAM system developed in Germany, with over 25 years of experience. The open CAD/CAM software is used in industry and in the medical field for professional manufacturing.



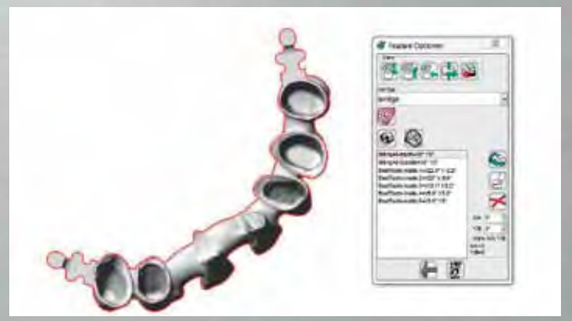
Professzionális és átfogóbb dokumentáció

Highlights

- Completely open CAM system, not bound to a material supplier
- No annual license fees, unlimited duration
- Very easy to use, with a short training period
- Suitable for 4 and 5-axis machines
- Additionally equipped with grinding strategies for glass ceramics, lithium disilicate, and feldspars
- Also available for your machines when you upgrade your existing software (isy-CAM3.0/3.2 and iCAM V4)
- Automatic data import
- Demand-driven automatic height optimization
- Everything at a glance, Job View and all blanks
- Reduction of milling times by up to 20%-40%
- Hybrid milling technology
- Automatic placing of holding brackets
- Milling strategies for virtually all implant systems
- Improved job orientation, with potential preparation margin recalculation
- Free positioning of the hexagon or octagon in implant systems
- Intuitive milling strategies; by simply selecting an area, it is automatically processed with the next smaller tool
- Angle default setting for automatic “undercut-milling” for 4-axis systems
- Enhanced and simplified functions for creating and moving the holding brackets
- Parameters for holding brackets, drops, bending connectors, and job identification can be adjusted using material-related default settings
- All jobs placed in the blank can still be subsequently changed as desired
- Milling strategies can be comfortably adjusted
- Automatic undercut detection
- 64-bit multi-core support

Integrated new modules:

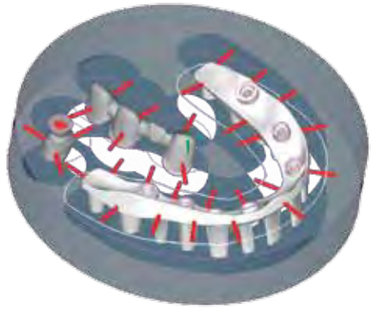
- Automated milling of tooth models
- Production of prefabricated abutments by nt-trading and Medentika
- Production of prefabricated ceramic crowns by pritidenta®
- Automated milling of splints, model casts, and implant-supported, screw-fitted applications is possible

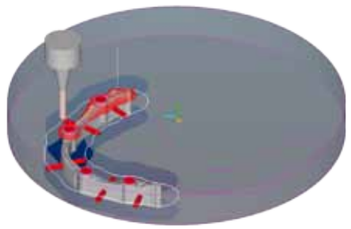


CORiTEC iCAM V5

High-end **CAM software** with perfect **flexibility!**

Automatic
angle detection





Optimized strategies for implant restorations

iCAM V5 is the high-end CAM solution of imes-icore GmbH. It enables high-precision calculation of 5-axis simultaneous milling data for excellent finish quality and fitting accuracy. Especially for hard materials such as glass ceramics, CoCr and titanium, accurate high-resolution milling data is crucial for best fit and long tool life.

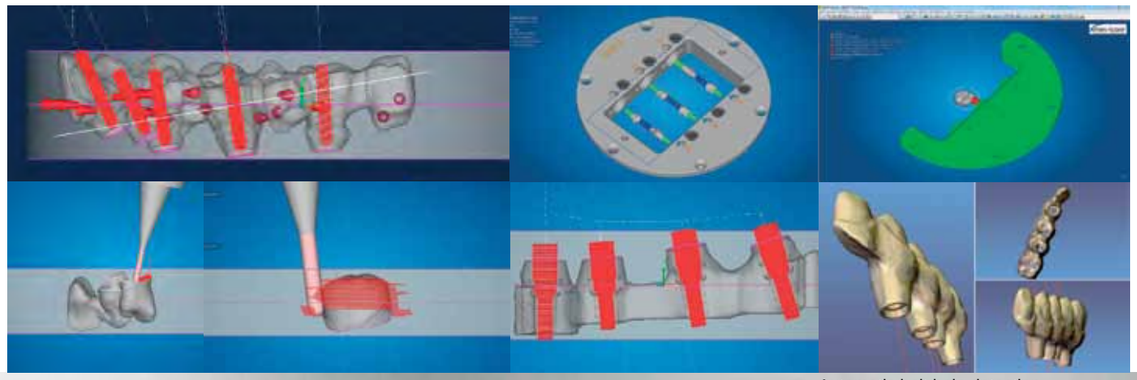
Furthermore, the extremely high milling data resolution results in a perfectly quiet and precise running of your milling machine, and thus increases the tool life. Thanks to the predefined milling strategies developed by imes-icore for all materials and applications, iCAM V5 offers a valuable CAM solution that increases the productivity of the CAD/CAM system, and maximises customer satisfaction. Precisely these options are used to control the high-end imes-icore milling machines.

Furthermore, iCAM V5 includes essential features, such as fully automatic separation of holding brackets, automatic creation of sintering supports for zirconium dioxide, and complete flexibility in the integration of further milling tools, or custom milling strategies.

5 axis
Simultaneous milling

Height optimization

Automatic detection of edges/corners



Automatic bolt hole detection

Highlights

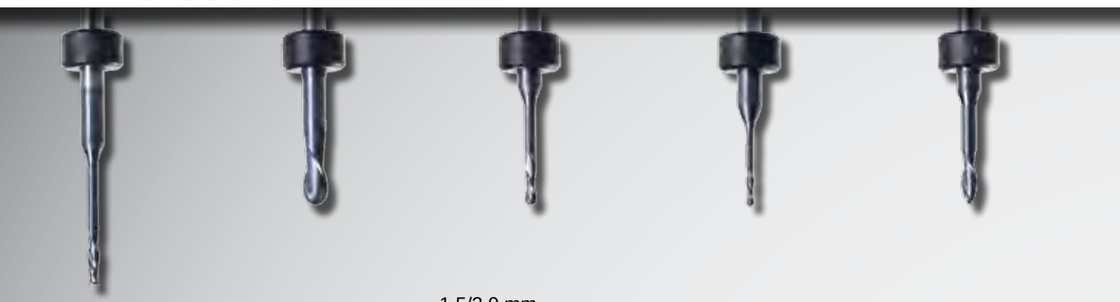
- Completely open CAM system, not bound to a material supplier
- Very easy, automated operation with a short training period
- Automatic detection of all necessary parameters, such as preparation margins, insertion directions, bore holes, etc.
- Automatic height optimization to save material
- 5-axis simultaneous machining and/or 3 + 2 machining to reach difficult areas
- Creating/copying/modifying existing and custom milling strategies/templates
- Optimal cutting strategies, which enable significant saving of milling time compared to other CAM solutions
- Production of prefabricated abutments from nt-trading and Medentika
- Production of prefabricated ceramic crowns by pritidenta®
- Automated milling of models, splints, model casts, and implant-supported, directly bolted applications is possible
- Detailed and fast simulation of the milling process
- Implant replacement for using own implant libraries for quality assurance.
- Predefined, free of charge post-processors for all imes-icore milling machines
- Possibility of connecting holding brackets (clusters)
- Very easy, automated operation, with a short training period
- Predefined, free of charge post-processors for all 4 and 5-axis machines are thus suitable for all imes-icore milling machines
- Creating/copying/modifying existing and custom milling strategies and templates
- Grinding of ceramic and lithium disilicate blocks
- Calculation of milling data for all current and proven milling machines
- Milling of jobs with multiple insertion directions/ undercuts with all 4-axis machines (3 + 1)
- Automatic detection of preparation margin and bore holes
- Fine finishing strategies up to a cutter diameter of 0.3 mm
- Automatic undercut detection and representation
- Complete or partial removal of freely definable holding brackets
- Also available in a CAD integrated version.
- Optimization of cutting direction from the inside and outside
- Use of up to 8 processor cores to accelerate milling measurements
- Simulation of the milling process, incl. collision control in real time
- Dynamic preview with the possibility of carrying out measurements
- Reuse of partially used blanks
- Easily editable, predefined tools and milling strategies
- Option to create sintered drops or sintered platforms
- Automatic management of specific abutment forms, such as hexagon socket
- Visual automatic collision detection for tool, spindle and machine components

Cutters & Grinders

Customised solutions optimized for the relevant materials and equipment

All imes-icore milling tools are specifically designed and optimized for the different requirements of different materials. The dimensions and cut geometries have been precisely defined, in order to achieve optimum milling results, while ensuring long tool life. In combination with imes-icore milling machines, the high-quality milling tools always guarantee optimal process safety and maximum efficiency in the production of restorations.

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 PMMA / nano-composite/wax

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

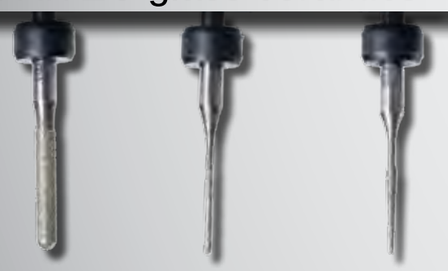
2.5/3.0 mm
Article no. 526016 2503
Radius end mill
Zr/PMMA/Wax

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

0.6/3.0 mm
Article no. 526012 0603
Radius end mill Zr/PMMA/
Wax (tolerance 12 mm)

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

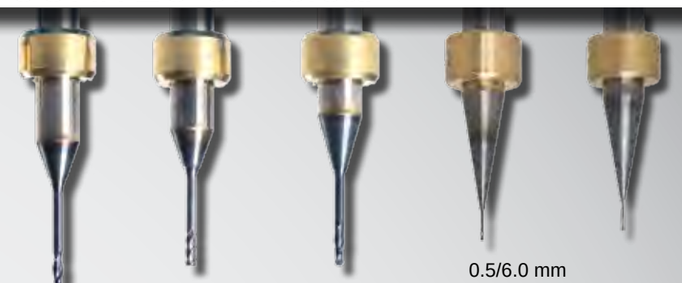
CORiTEC CoCr / Ti

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
Shaft-milling tool universal
2 blade cutter long

1,5/6,0 mm
Article no. 526002 1506
Shaft-milling tool universal
4 blade cutter short

1,5/6,0 mm
Article no. 526000 1506
Radius milling tool
universal

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

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

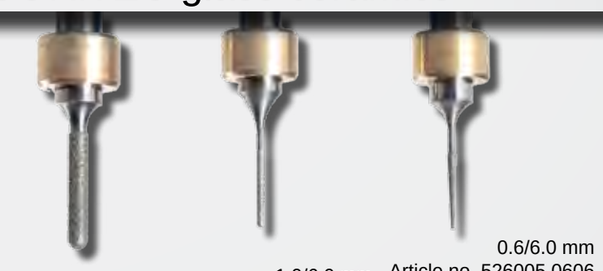
0.6/6.0 mm
Article no. 526019 0606
Radius end mill
Zr/PMMA/Wax, tapered

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

0.6/6.0 mm
Article no. 526012 0606
Radius end mill Zr/PMMA/
Wax (tolerance 12mm)

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

CORiTEC glass ceramics

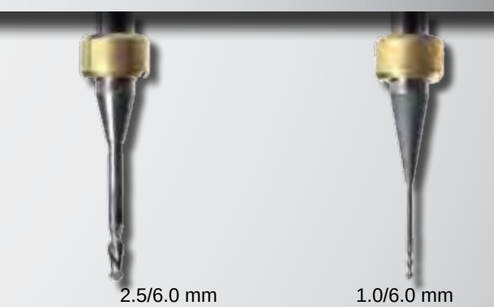


2.5/6.0 mm
Article no. 526005 2506
Diamond grinding pin

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

For more detailed information about tools in conjunction with Materials, please see our accessories booklet

High-quality materials

for imes-icore machines

CORiTEC Zr ht+ (Highly translucent zirconium dioxide)

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

CORiTEC Zr transpa Disc (zirconium dioxide)

light, medium, intense, low chromatic, high chromatic

- Pre-colored highly translucent material
- Affordable 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

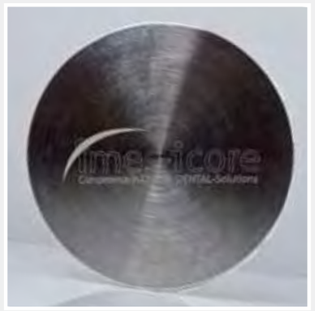
CORiTEC Zr Disc (Zirkoniumdioxid)

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

CORiTEC CoCr Disc

Non-precious alloy

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



CORiTEC Ti Disc

Pure titanium grade 2, pure titanium grade 4

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

CORiTEC PMMA Disc

- 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

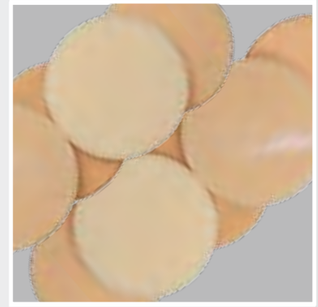
CORiTEC Wax Disc

(Wax, grey)

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

innoBlanc htp PMMA (polymethylmethacrylate)

- Residual monomer content of 0.07% - 0.10%
- Cell vitality rate of 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 moulding process, under highest quality control.
- Color pigments with FDA (Food and Drug Administration/USA) approval



innoBlanc splint (transparent)

PMMA (polymethylmethacrylate)

- Residual monomer content of 0.19%
- Cell vitality rate of 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.

innoBlanc medical PEEK

(polyetheretherketone)

- 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

CORiSHADE smile

CORiSHADE smile is used in particular for the coloring of translucent zirconium dioxide. In addition to the mechanical properties, also the optical properties are now limitless. For an esthetic effect, the fluids were perfectly matched to the CORiTEC Zr blanks.

CORiTEC i3Dscan

Dental scanner

The new model of the imes-icore i3Dscan has proved itself with its impressive speed and precision. Complete jaw digitization takes only 90 seconds. The scan of 12 individual stumps with the new multi-case module takes 80 seconds, and sets new standards in the field of light stripe scanning. Due to its very large measuring field, and in combination with the exocad dental CAD software, imes-icore offers a complete solution for maximum productivity, which is perfectly and precisely suited for implant-supported tasks. Easy and fast operation, and the reliability of the system even with very complex structures, offer beginners and experienced users a smooth workflow. The use of high-quality components and the “made in Germany” manufacturing process guarantee reliability and longevity of the devices. With a precision of up to 10 µm, the light stripe projection ensures the required high precision. The STL open data format ensures independence and flexibility. This resulted in the development of the new i3Dscan, in collaboration with dental labs and clinics, for use in daily practice. Many years of experience have been invested in the development. The current operating software is the basis for tailored designs in all areas. The new, fully automatic 3D calibration makes production of large-span, screw-fitted implant restorations possible. In addition, the i3Dscan is able to digitalise the craniofacial information from physical articulators in the correct position, thanks to the patented ScanFixators. In conjunction with the exocad CAD software, a precise production with correct craniofacial data and the “virtual articulator” module is possible. The models, which were set previously in the articulator with face-bow, can be employed directly in the scanner with the magnetic split plates corresponding to the system. The scanning software automatically combines the obtained measurement data, and provides it with the information of the patient-specific condyle positions.

Technical highlights

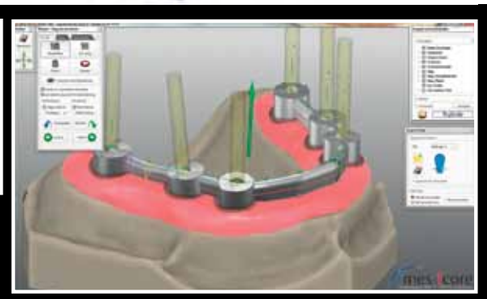
- Extremely fast, fully automatic scanner
- Light stripe/projector technology
- Newly developed large measuring field
- Possibility of using full-fledged articulated models, incl. articulator
- Ideal for large-span, screw-fitted implant applications
- Very short scanning and calculation times
- Highly accurate results thanks to automatic 3D calibration
- Removable object holder
- Accuracy up to 10 µm
- Output as a completely open STL file

The right software

exocad CAD software

In the CAD field, i3Dscan is supported by the exocad software fully and without limitations. In addition to standard applications such as crowns, bridges and telescopes, advanced features are also available, such as virtual articulators, directly bolted implant bridges/brackets, one-piece custom abutments, occlusal splints, etc. Another advantage of this combination is the complete openness, since there are no license fees for the scanner, or for the exocad software. exocad as dental CAD software is the ideal supplement to the i3Dscan dental scanner. It is tailored precisely to the dental workflow for the construction of dental restorations. As a result, even inexperienced users will find easy access to the digital dental technology. exocad was developed in close cooperation with experienced dental technicians and software specialists. The ergonomic user interface can be easily adapted to the skill of the user. It is therefore popular among beginners, as well as among users already experienced with digital applications. From designing simple caps, through construction of large-span, anatomically reduced bridge constructions, all the way to sophisticated implant restorations, exocad will easily and quickly guide you to the perfect result. By scanning a register, wax-up, or situation model, a basis for an optimal design is created. The position of articulated models is precisely transferred with the ScanFixator from the physical to the virtual articulator. Following application of a face-bow, the patented process transfers the patient’s exact condyle position to the CAD software.

exocad GmbH



Highlights

- Applications and functions
- Prefabricated crowns (pritidenta®)
- Photo-realistic presentation of the design in real time
- Mirroring existing teeth in the ongoing design
- Anatomical caps, crowns, bridges, telescopes, inlays/onlays/veneers and abutments
- Extensive and free implant system library (also for prefabricated abutments)
- Extensive options for using full-fledged articulated models, incl.
- occlusal splints; optimal design thanks to full-fledged virtual articulator
- One piece custom abutments, directly bolted implant bridges and implant brackets
- Use of situation models and WaxUp constructions
- No license fees; hence no running costs

CORiTEC IntraScan 3D
Intra-oral scanners

intraScan3D, the imes-icore solution to create digital impressions, allows the dentists to assess the intra-oral state directly and comprehensively, and to process this data in the form of a highly accurate digital 3D model in the exocad CAD software.

The digital recording of the oral condition happens in real time. In contrast to most other scanners, the generated model data is saved in open STL format, and can thus be processed by any CAD application.

The entire camera system is integrated into a 720-gram hand piece. The intraoral scanner can be easily connected with a PC/laptop via plug & play using an USB cable. The scanning process can be interrupted at any time, and resumed after draining. In addition, the scanner does not need to be kept at a certain distance to the tooth.

Perfectly matched to our CORiTEC 140i

Technische Highlights

- Open STL interface
- No license fee
- Plug & Play installation
- All possible applications are already set up
- Optimized determination of preparation line
- Confocal technology
- Powder-free scan
- Scan field (X, Y, Z): 9.6 x 10.4 x 18 mm
- Pixels on the sensor (X, Y): 144 x 90
- Pixel size: 50 x 86 µm
- Individual image acquisition in less than 0.1 seconds

Perfect connection to CORiTEC Dental milling systems

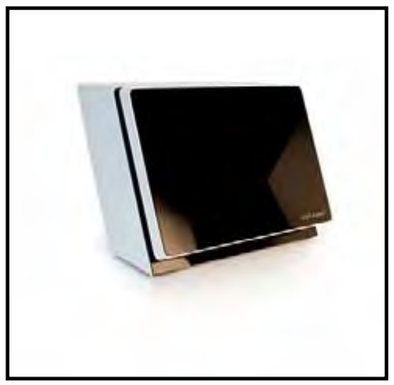
3shape Dental scanner

3shape D500:

The 3Shape D500 scanner is designed for small to medium-sized labs which look for an easy entry into the digital CAD/CAM dentistry. This compact scanner is equipped with 3shapes, the leading scanning technology. With an extendable range of dental applications, a cost-effective CAD/CAM solution is available for any lab size and budget.

3shape D800/D810

The 3Shape D800/D810 scanners are suitable for medium to large labs. Highest precision and degree of accuracy for the latest indications and applications. Its new and unique ability of scanning textures with **two 5-megapixel cameras** leaves nothing to be desired. A device without limitations, of maximum productivity, extreme accuracy, as well as full range of dental applications, allows the lab to achieve best results and flexibility.



3shape D900/910

Four high-resolution 5 megapixel cameras and new Blue LED technology ensure extraordinary speed and highly accurate color scanning. Ideal for large, high-volume, production-oriented labs. The D900 is made from a special heat-resistant metal alloy to ensure consistent accuracy even in demanding ambient conditions of the lab. The D900 scanner provides users with very high scan speed, unique color scanning, detail enhancement, and high accuracy.

Best results in combination with all imes-icore machines

CORiTEC Sintering furnaces

iSINT eco, iSINT-HT and iSINT HT-S

The **iSINT eco, iSINT HT** and **iSINT HT-S** sintering furnaces are designed for daily sintering processes thanks to their 4-6 MoSi2 heating elements. Due to the extremely even temperature distribution in the combustion chamber, homogenous shrinkage of zirconium dioxide restorations is guaranteed. Thus, the best fit can be achieved, especially for large-span bridges and brackets. The **iSINT-HT** and **iSINT HT-S** sintering furnaces are also available in a “speed” version. Due to the microprocessor-controlled temperature control, the “Speed” variant enables a sintering process in under four hours. The emergency cooling function, secured by a rechargeable battery, also prevents equipment damage due to power failure.

The imes-icore sintering furnaces thus ensure high-quality production of zirconium dioxide restorations without compromising on quality. The maximum attainable temperature of up to 1650°C, and the smart sintering programs, also provide you with a future-proof investment in a quality product “Made in Germany”.

You are welcome to contact us for further technical data on sintering furnaces.

The **CORiDRY** pre-drying device ensures rapid and uniform drying of the colored zirconium dioxide frameworks through air circulation. The device is CE-certified and easy to use.

Advantages:

- No staining thanks to even drying
- Pre-drying in the sintering furnace is not necessary; this reduces the wear of heating elements in the sintering furnace.
- Two heating levels up to 70°C
- Retractable cable for space-saving stowage of the device
- CE-certified
- 230 V/50 Hz

imes-icore
made in Germany

Exhaust units and under-benches

The **CORiTEC iCompVAC,** on the one hand, brings a powerful extraction system with a brushless turbine. On the other hand, an oil-free compressor is installed in the same casing, which allows short-term operation of the **140i, 245i, 250i or 450i CORiTEC machines**.
Please note that the compressor of the **iCompVAC** is not suitable for continuous operation.
The unit is controlled automatically at the start and end of the milling program, so that self-sufficient milling is guaranteed overnight or on weekends. In addition, the **CORiTEC iCompVAC** can be switched manually, which can also be used e.g. for cleaning of the machine. The large integrated filter bag allows for maximum filtration of particulate matter, and thus does not require frequent replacements.

The new **CORiTEC iVAC eco+** is the younger sister of **CORiTEC iCompVAC.** It only differs in that it does not have a built-in compressor. Thanks to the brushless turbine, this powerful extraction system is extremely compact and very quiet. Here again, the particulate matter is transferred to specially designed collection bags that meet the degree of filtration required for e.g. zirconium dioxide. A downstream HEPA filter prevents the escape of residual particulate matter. Thus, the **CORiTEC iVAC eco +** can be easily operated directly in the working area of the lab.

The **CORiTEC iVAC pro** extraction system:
The industrial **iVAC pro** extraction system features a durable filter cartridge. This eliminates the need to reorder or replace filter bags. The milling dust falls into a dust tray below the filter cartridge. Intelligent automatic self-cleaning of the filter creates a constant suction power without losses. Thus, the extraction system ensures a minimum of maintenance.

The under-frame, specially developed to meet the machine requirements, features an appealing and solid design, and plenty of floor space. The stable wheels ensures the easy moving of the system. Drawers, cable bushings, and a cabinet to integrate the **iVAC2** and **iVACeco** extraction units (noise reduction) are already provided.

Kontakt

Switchboard

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imes-icore
made in
Germany

Our service
The way we work

“Development, production, sales and service in Germany”

Benefit from our expertise

From conception to implementation, from employee training to delivery of your system, you will work together with our highly qualified staff. To ensure our high standards, we monitor the perfection and quality of each manufactured device.

With over 300 employees in Germany and an ever-widening network of distributors, we guarantee fast and permanent availability of contact persons and spare parts. In case of questions, please contact our experienced specialists. You can contact them easily via phone, or via online remote maintenance function. Thus, applications can be discussed and worked on: the control surface, control of the machine parameters, error diagnostics, and much more can be explained. Experience has shown that most questions or problems can be addressed in this way.

Phone service: +49 (0) 66 72 898 469

Precision you will notice!

imes-icore has been working increasingly in the area of modern CAD/CAM solutions for the medical industry for 12 years, apart from manufacturing industrial machinery. Here, too, **imes-icore** is known as a specialist for CNC processing. High-precision milling machines and CAD/CAM systems of the CORiTEC series are in great demand in the dental sector. Modular solutions are available for every requirement in the dental lab or milling center, so we installed over 4000 dental systems successfully.

Whether for medical technology or industry - our aim to provide state of the art CNC systems, and successfully assist our customers in the future, is our top priority.

Production Plant 1 in Eiterfeld

How to find us

From the North:
via A7 to A4 towards Bad Hersfeld, then B27 towards Hünfeld, in Sieglos turn left to Eiterfeld

From the East:
via A4 towards Bad Hersfeld, then B27 towards Hünfeld, in Sieglos turn left towards Eiterfeld

From the South:
via A7 towards Fulda/North, then B27 to Hünfeld, exit towards the North towards Eiterfeld

From the West:
via A5 to A4 towards Bad Hersfeld, then B27 towards Hünfeld, in Sieglos turn left to Eiterfeld

Address:
imes-icore GmbH
Im Leibolzgraben 16
36132 Eiterfeld, Germany

In the industrial area follow the signs