



# Advanced CAD/CAM innovations for your perfect smile!



# Welcome to the future of dental technology!



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The company imes-icore stands for traditional corporate values like innovation and quality „Made in Germany“. The aim is the development of individual CAD/CAM solutions that fit the need of the individual dental laboratory. As a company of the isel-group known for their quality milling machines and CAD/CAM components for the global markets imes-icore combines a long history in technology combined with experience in the global dental markets.

Our ambitious team of experienced CNC and dental specialists and our innovative high-tech development group along with our local dealerships will provide a new dimension in dental CAD/CAM solutions.

The faster and faster developing market for dental technology requires highly flexible CNC and dental production systems with increasing efficiency. In addition we experience increasing demand in the quality of software and innovative materials.

We have a very clear mission for the dental future: As a full-service company we will develop and utilize global alliances to realize your needs and our goals. We will continuously increase the quality of our innovative technologies and update our software tools and improve our materials and customer-oriented service.

Our currently six different dental CAD/CAM systems offer the optimum modular approach to the future demands of every dental lab or milling center.

Our CORiTEC system delivers highest precision and fit and lots of room for development in all fields of today's dental prosthetics. With our products we offer a network of safety and productivity for the daily needs of our customers. Doing this we deliver this inspiring precision and quality to our customers.

Our high demand is supported by our program of scanners, furnaces, suction units and quality consumables; regardless if you use our zirconia material, our waxes, resin materials, titanium or cobalt-chrome.

imes-icore is certified in:

EN ISO 13485:2003 + AC 2009  
ISO 9001:2008



Let our products and service inspire you!

**imes-icore. Makes your smile perfect!**





# The intuitive All-in-One solution!

### A scanner solution for every lab:

3Shape offers the market's most flexible range of technology-leading dental scanners for 3D scanning of both impression and gypsum models. Whether you are seeking a secure entry into digital dentistry, or expanding your business model with the full range of dental indications and utmost accuracy - 3Shape has a scanner solution for you.

### Designed for productivity:

3Shape's Dental Scanners - series D500, D700 and D800 give labs increased productivity plus customer satisfaction through faster delivery and superior clinical results. 3Shape's Dental Scanners are so easy to use that extra staff training is barely required. Object fixation is quick, and a single click in the user-friendly software starts the scan.

### The market's most complete 3D scans:

2 cameras with reduced angle enables impressions, deep inlays and full undercuts to be scanned effectively. The **3-axis motion system** tilts, rotates and translates the object facilitating scanning from any viewpoint - more than 350 degrees of a sphere.



### 3Shape D500:

3Shape's D500 series scanner is designed for small to medium-sized labs looking for an easy entry into CAD/CAM digital dentistry.

These compact scanners are built on 3Shape's leading scanning technologies with a reduced range of dental indications to provide a cost-efficient CAD/CAM solution for any laboratory size and budget.

### 3Shape D700/D710 series scanners:

3Shape's D700 series scanners are for medium to large labs where productivity and flexibility are the key criteria.

The D700 scanner series is 3Shape's user-acclaimed success, servicing thousands of labs all over the world. The D700 is a workhorse of productivity, enabling high throughput for both standard and advanced indications. The D710 additionally supports Multi-Die scanning for ultimate efficiency.

### 3Shape D800/D810 series scanners:

3Shape's D800 series scanners are designed for medium to large labs that demand the utmost accuracy and detail levels for even the most advanced indications. With its new and unique **Texture Scanning** capabilities plus 5.0 MP cameras, 3Shape's D800 series scanners wield the market's most advanced 3D scanning technologies.

This is a no limitations device, providing high productivity, extreme accuracy and the complete scope of dental indications for full-service labs that accept only the best.

D500:



impression scanning:



texture scanning:



## Dental System

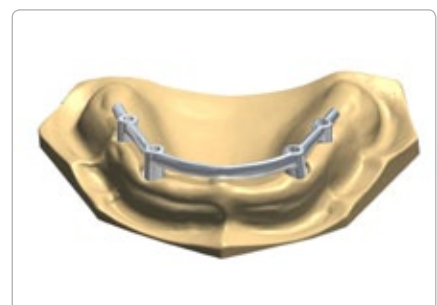
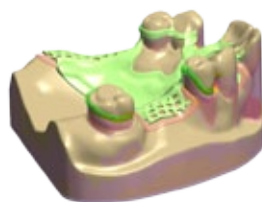
Known throughout the dental industry as the most powerful CAD/CAM system in the world, 3Shape's Dental System™ provides 3D scanning, CAD modeling, order management, intraoral scanning, dentist-lab communication, and interfaces to essentially all manufacturing equipment and materials.

No other CAD/CAM system on the market supports the comprehensive width of dental indications and dentist-services enabled by the 3Shape Dental System™.



### New inside Dental System:

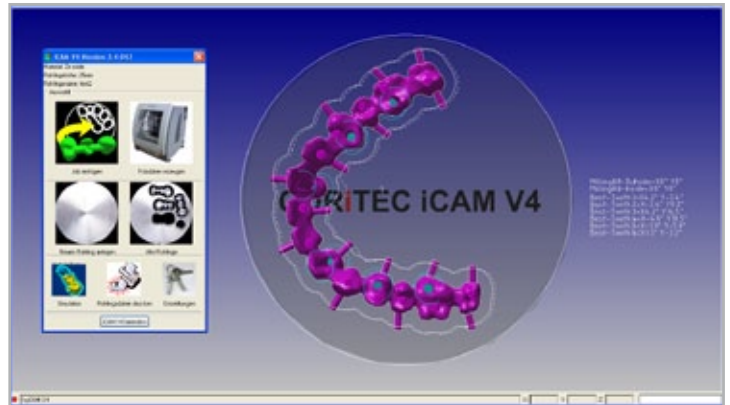
- » Adaptive Impression Scanning  
Fast impression scan that works!
- » Coping and bridges frameworks  
Powerful and flexible Inside-Out Modeling
- » Full anatomical modeling within DentalDesigner™  
Optimized productivity, durability and aesthetic with a few clicks
- » Simultaneous modeling of upper and lower jaw  
Unique design flexibility
- » Dynamic Virtual Articulation  
Outstanding occlusal adaption and function
- » Inlays, Onlays and Veneers  
as easy as the design of copings
- » Press ceramic for a full digital restoration  
Advanced productivity of Veneers, Inlays, Crowns and bridges made of press ceramic
- » AbutmentDesigner™  
Individual Abutments, parallel Abutments, Outside-in Design
- » Sophisticated implant bars and bridges  
Highest accuracy and flexibility that saves time and money
- » Removable Partial  
Can be designed in less than 10 minutes



# Unlimited possibilities with precision!

**CORITEC iCAM V4** is a highly reputable 5-axes profi - CAM-System based on Windows 7 which matured out of many years of development. It's easy, fast and safe handling makes **iCAM V4** unique. It is the perfect user software for the automated fabrication of high end dental restorations. It calculates the milling data in a very short time referring to optimized and safe milling strategies developed in 8 years of constant improvements for all kind of dental const- ructions and materials.

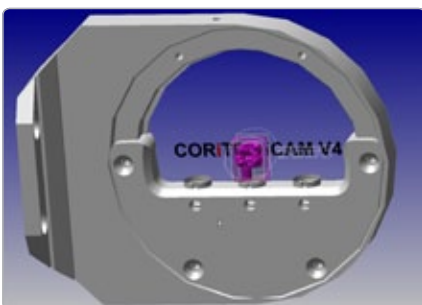
Menu guided user interface and easy to operate surfaces as well as many fully automated functions are resulting in a reliable and simple operation. **iCAM V4** guides the beginner and expert automa- tically and safely through the entire milling pro- gram. In the background of the dental frontend a German, full industrial CAD/CAM-System with over 25 years of experience is working. The open CAD/ CAM-Software is used for professional constructions and manufacturing by over 4000 users in the indus- trial and medical field which can be fully used by the operator.



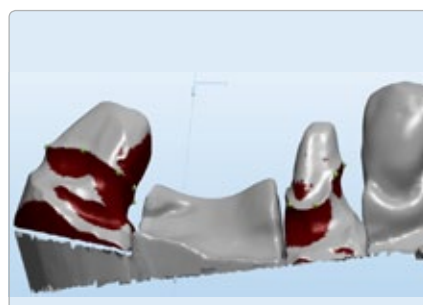
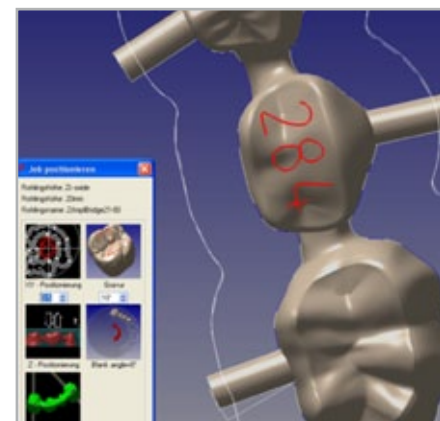
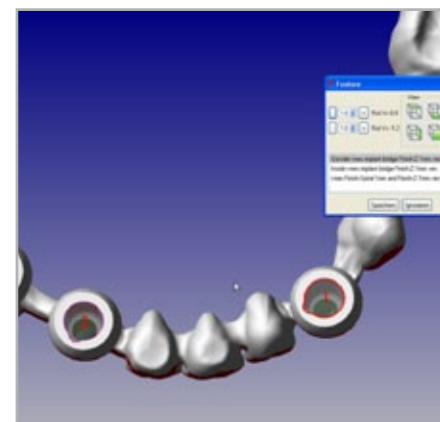
## Highlights

**Enhance your productivity with iCAM V4 and the following possibilities:**

- » complete open CAM-System without a commit- ment to a material distributor
- » no annual fees at an unlimited run-time
- » very easy operation with a short start-up period suitable for 3-, 4- und 5-axes machines from imes-icore
- » additional grinding of glass ceramics and lithium disilicate blocks. With an upgrade also available for existing machines



- » enhancement of the functions of a 4-axes machine through the usage of the **Nonius-quick-release ring** from imes-icore. Therefore it is possible to change a blank without removing the present six ring screws. Additionally it is possible to freely rotate a height optimized or 3+1 work.
- » calculation of milling files for all originally produced milling machines by imes-icore, i.e. 2100, 4030, 3020, 4820...
- » milling of works with two insert directions/undercuts on all 4-axes machines (3+1)
- » milling data calculation with up to 5 axes
- » import and free alignment of any STL files
- » automated preparation line detection
- » fine-finishing-strategies down to a tool diameter of 0,6mm
- » insertion of the batch number, manufacturer and material into the database
- » percental indication of usage of the blanks
- » creation/copying/changing of own milling strategies
- » automated borehole detection on abutment constructions
- » automated height optimization to save material
- » optimized milling strategies that are up to 30% faster than in the previous version. Additionally a higher surface quality will be reached
- » milling of teeth models, boring templates and removables (in preparation)
- » automated detection and indication of undercuts
- » complete or partial cutting of free definable bars/connectors
- » optimization of the milling direction on in- and outside
- » feature „engrave“ to clearly mark or personalize jobs
- » usage of up to 8 CPU cores to speed up the calculation time of milling data!
- » simulation of the milling process incl. collision control





# High-End CAM-Software with complete flexibility!

**iCAM V5** is the High-End CAM solution from imes-icore.

**iCAM V5** allows a high precision calculation of 5-axes-simultaneous-milling data for best surface quality and fitting. Especially with hard materials like glass ceramics or CoCr high resolution milling data determines for best fittings and a high tool durability. Exactly those possibilities will be used to control the High-End-milling machines from imes-icore.

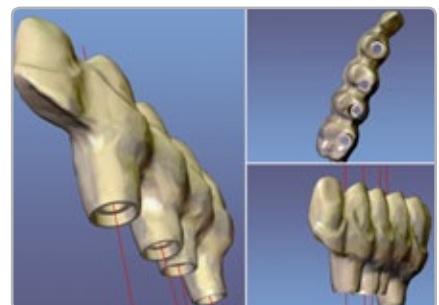
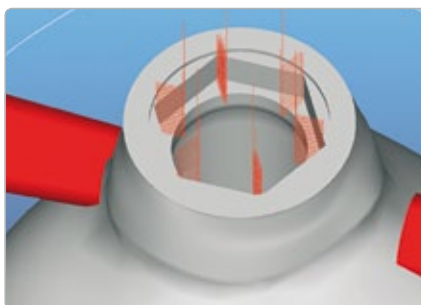
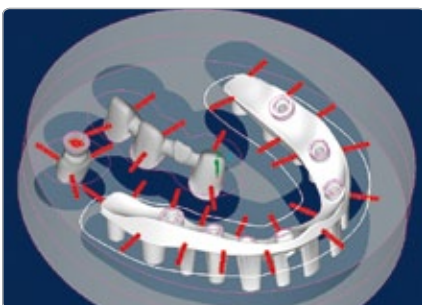
Further **iCAM V5** includes essential features like the fully automated cutting of support bars, automated creation of sinter bars for Zirconia as well as the total flexibility to embed further milling tools or own milling strategies.

Another fundamental feature of **iCAM V5** is the possibility to import data from different CAD-Systems.



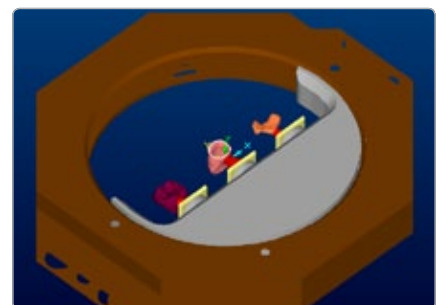
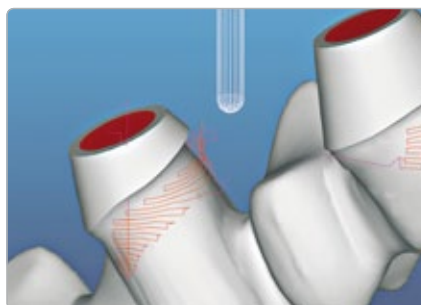
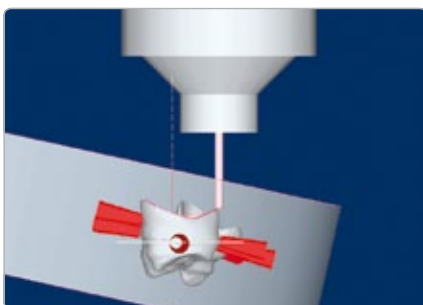
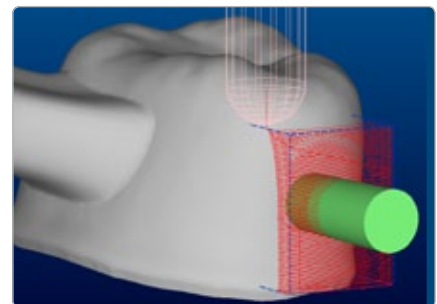
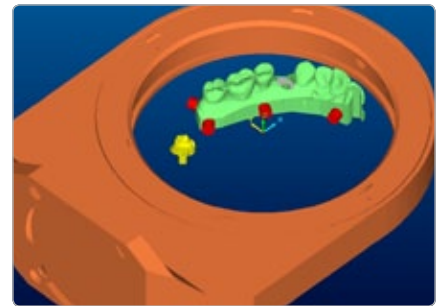
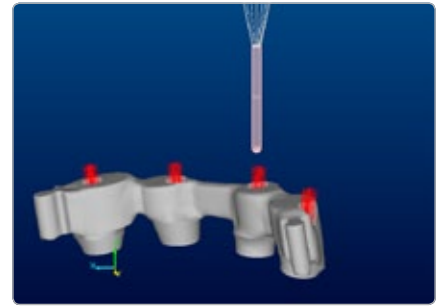
## Highlights

- » complete open CAM-System without a commitment to a material distributor
- » very easy operation with a short start-up period
- » suitable for 3-, 4- und 5-axes machines from imes-icore
- » 5-axes-simultaneous or 3+2 processing
- » possibility to create own post processors
- » grinding of glass ceramics and lithium disilicate blocks. With an upgrade also available for existing machines
- » calculation of milling files for all originally produced milling machines by imes-icore, i.e. 340i, 440i, 2100, 4030, 3020, 4820...





- » milling of works with two insert directions/undercuts on all 4-axes machines (3+1)
- » automated preparation line and borehole detection
- » fine-finishing-strategies down to a tool diameter of 0,6mm
- » creation/copying/changing of own milling strategies
- » automated height optimization to save material
- » optimized milling strategies that are faster compared to other CAM solutions. Additionally a higher surface quality will be reached
- » milling of teeth models, boring templates and removables (in preparation)
- » automated detection and indication of undercuts
- » complete or partial cutting of free definable bars/connectors
- » optimization of the milling direction on in- and outside
- » usage of up to 8 CPU cores to speed up the calculation time of milling data!
- » simulation of the milling process incl. collision control
- » self-adjusting of the tool bar with icon depending on the knowledge of the user
- » dynamic preview with the possibility of measuring
- » re-use of partial used blanks
- » possibility to connect bars to each other
- » easy to edit predefined tools and milling strategies
- » possibility to create sinter pins and sinter plates
- » automated management of specific abutment shapes like HEX or edges
- » undercut re-machining with "lollipop tool"
- » visual automatic collision check for tools, spindle, stock and components
- » predefined post processors for all imes-icore milling machines



# The entry with precision!

The new **CORiTEC 240i** from imes-core opens up the road to dental CAD/CAM-automation for you. Space saving and very compact the **CORiTEC 240i** emphasizes easy installation and multi-purpose usability. Thanks to an automated 10x tool changer and 4-axes 45 units and more can be manufactured without changing the blank. The **CORiTEC 240i** is designed to dry-mill all important materials like Zirconium oxide, Aluminum oxide, resins and waxes. The unit is especially designed for small and medium size labs to enter the dental CAD/CAM production.

**As an option the CORiTEC 240i is also available for wet-processing of glass ceramic blocks.**

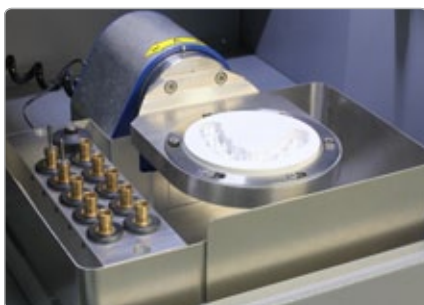
## Applications

Processing of all important dental materials by dry and wet milling with 4 axes

- » Zirconium oxide
- » Aluminum oxide
- » Resins like PMMA/Composite
- » Waxes
- » Glass ceramics, feldspar, lithium disilicate (optional)

## Highlights

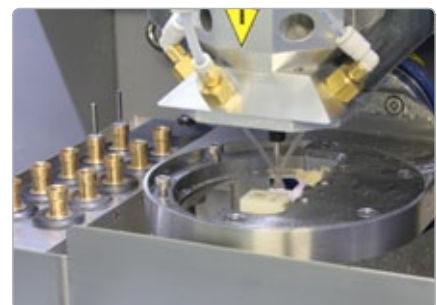
- » Due to the low price acquirement eminently economic and therefore a very short payback period
- » fully automated 10 times tool changer incl. automated tool length measurement
- » tool running time control with display
- » automated tool-breakage-control
- » easy tool management and blank positioning
- » easiest operation control:  
With one click to an excellent result
- » night-mode: after successful processing the controller will be switched off automatically
- » highest precision due to a high frequency spindle with up to 60.000 rpm
- » undercut processing through active usage of the rotary axis
- » as extension in bigger labs and milling centers
- » up to 45 units in one material without a blank change
- » optionally incl. a control PC based on Windows 7
- » optionally delivered with a fitting machine table





### Technology

- › Rigid, industrial, heavy duty steel/aluminium table top design
- › Swinging hood with integrated Gas spring for ergonomical closing and opening
- › 4-Axes processing (NC-controlled)
- › Easiest connection and using with iCAM V4
- › Micro-Step-Controller and motors in all axis
- › Rotation-axis with transmission for high stability
- › Connection to any desktop-PC/laptop possible
- › Fastest controller-technology for shortest milling-time
- › One blankholder with NC-controlled automatic 360 degree axis and real 4-axes-processing
- › High-Frequency-spindle with up to 60.000 rpm
- › Cooling vent integrated into spindle holder
- › Cooling system for wet processing (optional)
- › Suction with closed lid for optimized absorbing
- › Automatic 10-time direct tool-changer
- › Tools with 3 mm shaft
- › Integrated high-precision tool length sensor up to 2µm
- › Automatic air-pressure control
- › With control software "Remote-DENTAL 1.0"
- › 115 V/230 V-versions
- › Compressed air consumption app. 80 l/min (min. 6 bar)
- › Weight: 106 kg
- › 506 x 738 x 670 mm (WxHxD)





# The compact class of dental automation!

The **CORiTEC 340i** from imes-core offers you optimized milling results with higher productivity. Space saving and very compact the **CORiTEC 340i** emphasizes with best quality of the milling results. The used servomotor-technology allows an accelerated processing at high dynamic with consistent high precision and quality. The new user-surface „Remote DENTAL 1.0“ inspires with easiest operation. Doing this you will get to perfect milling results with one mouse-click. Thanks to the full automatic 10 times tool-changer and real 4-axes processing it is possible to produce up to 45 units of one material without changing the blank. In the standard-version the **CORiTEC 340i** is made for producing all relevant dental materials with dry processing like Zirconiumoxide, Aluminiumoxide, PMMA and Wax. Optionally the **CORiTEC 340i** is also available for wet processing of glass ceramic blocks. The machine is well suitable for an entry into the dental CAD/CAM-production at particularly highest flexibility and material diversity. Also the machine is usable for enlarging your actual CAD/CAM spectrum.

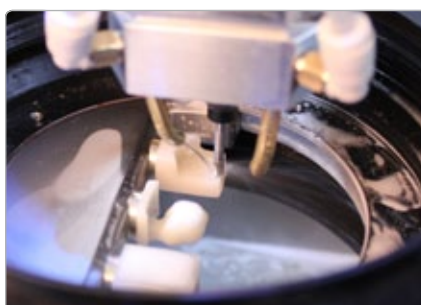
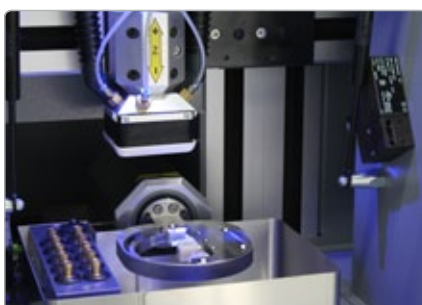
## Applications

Processing of all relevant dental materials in wet and dry-processing with 4 axes up to 14 units.

- » Zirconiumoxide
- » Aluminiumoxide
- » plastics like PMMA/composite
- » Wax
- » Glass ceramics, feldspar, lithium disilicate and titanium (optional)

## Highlights

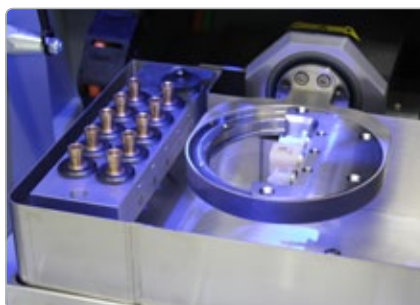
- » With the higher variety of materials and flexibility the 340i offers an optimal cost/performance ratio at high precision and dynamic
- » The integrated servomotor-technology allows a faster processing at consistent high quality
- » The full automatic 10 times tool-changer including automatic tool-length control allows the complete tool-assembly for all usable materials
- » Tool lifetime controller with report
- » Automatic Tool-breakage-control
- » Automatic tool change after wear-out
- » Night-mode: After successful processing the software will shut down automatically
- » Highest precision thanks to the high-frequency-spindle with up to 100.000 rpm
- » Undercut-processing with processing in different insertion directions
- » Up to 45 units possible without changing the blank
- » incl. control-PC based on Windows 7 with preinstalled control-software „Remote DENTAL 1.0“
- » Automatic control of the suction unit
- » Tri-color LED Interior Lightning
- » Optional with suitable desk





### Technology

- > Rigid, industrial, heavy duty steel/aluminium table top design
- > Swinging hood with integrated Gas spring for ergonomical closing and opening
- > 4-Axes processing (NC-controlled)
- > Servo-Controller and motors in all axes for high precision and dynamic
- > Rotation-axis with 100:1 transmission for highest stability
- > incl. a compact high-class control-PC in a modern design based on Windows 7
- > modern 19" TFT display
- > High-Frequency-spindle with up to 100.000 rpm
- > Cooling system for wet processing (optional)
- > Cooling vent integrated into spindle holder
- > Suction with closed lid for optimized absorbing
- > Automatic 10-times direct tool changer
- > Tools with 3 mm shaft
- > Integrated high-precision tool length sensor
- > Automatic air-pressure control
- > established blank holder for blanks with a diameter of 98,5mm
- > 115 V/230 V versions
- > Compressed air consumption app. 100 l/min (min. 6 bar)
- > Weight: 120 kg
- > 650 x 738 x 670 mm (WxHxD)



# Dental serial production in highest quality!

The **CORiTEC 440i** from imes-icore is a since years established milling system specialized for dry milling. The compact desktop machine offers you the flexibility to process different materials or different material heights in one throughput with two blank holders. Up to 90 units without a blank change are possible with one mouse click.

The used high-performance-controller with powerful brushless 200W AC motors in all linear axes allows an extreme fast machining with high dynamic on optimized precision and quality.

The new user interface „**Remote DENTAL 1.0**“ elates here with easiest operating. With only one mouse click you became perfect milling results.

The fully automated 8-times tool changer allows a complete placement with all necessary tools for all materials.

Thanks to the real 4-axes-operation it is possible to process undercuts and different insert directions for perfect precision and fitting.

The **CORiTEC 440i** is the specialist for the manufacturing of all essential dental materials in dry milling like Zirconiumoxide, Aluminiumoxide, PMMA, Wax or CoCr.

The equipment is especially adapted for the entrance into the dental CAD/CAM production with a high level standard of your Zirconiumoxid or other materials.

As well it is suitable for the connection into your milling center to cover the ever crowing market on Zirconiumoxide constructions.

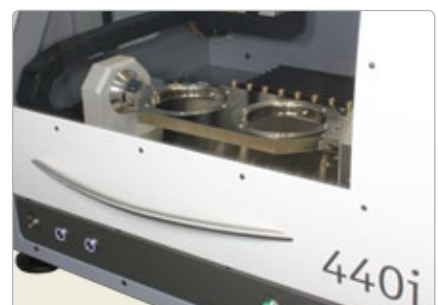
## Applications

Processing of all relevant dental materials in dry-processing with 4 axes up to 14 units.

- » Zirconiumoxide, Aluminiumoxide
- » plastics like PMMA/composite
- » Wax
- » CoCr (optional)

## Highlights

- » due to the specialization of the **CORiTEC 440i** on dry milling you expect perfect milling results with highest precision and fitting
- » The integrated high-performance-controller guarantees for highest dynamic and speed on optimized precision
- » The full automatic 8-times tool changer including automatic tool-length control allows the complete tool-assembly for all usable materials
- » Tool lifetime controller with report
- » Automatic tool-breakage-control
- » Automatic tool change after wear-out
- » Night-mode: After successful processing the software will shut down automatically
- » Undercut-processing with processing in different insertion directions
- » Up to 90 units possible without changing the blank
- » incl. control-PC based on Windows 7 with preinstalled control-software „Remote DENTAL 1.0“
- » Automatic control of the suction unit
- » Tri-color LED Interior Lightning
- » Optional with suitable table







### Technology

- › Rigid, industrial, heavy duty steel/ aluminium table top design
- › Swinging hood with integrated Gas spring for ergonomical closing and opening
- › real 4-Axes processing (NC-controlled)
- › high-performance-servo-controller in combination with powerful 200W-AC-motors
- › Rotation-axis with 100:1 transmission for highest stability
- › incl. a compact high-class control-PC in a modern design based on Windows 7
- › modern 19" TFT display
- › two blank holders
- › High-Frequency-spindle with up to 100.000 rpm
- › Cooling vent integrated into spindle holder
- › Suction with closed lid for optimized absorbing
- › Automatic 8-times direct tool changer
- › Tools with 3 mm shaft
- › Integrated high-precision tool length sensor
- › Automatic air-pressure control
- › established blank holder for blanks with a diameter of 98,5mm
- › 115 V/230 V versions
- › Compressed air consumption app. 100 l/min (min. 6 bar)
- › Weight: 150 kg
- › 730x820x820 mm (WxHxD)



# With 5 axes into the future of automated CAD/CAM technology!

The new **CORiTEC 450i** from imes-icore offers you complete flexibility in machining of all essential materials in 5-axes-simultaneous processing.

Chose this way into a safe future with the new high-end-desktop machine from imes-icore:

May it be the conventional processing of crown and bridge constructions or complex geometry like Abutments, Removable Partial or the milling of tooth models, there are no open wishes with the new **CORiTEC 450i**!

The precise milling results are enabled through a high-performance-servo-controller for 5-axes-simultaneous processing with powerful 200W-AC-motors in all linear axes as well as the compact rotation-swinging-unit.

With the extension to **wet processing** it is also possible to process materials like glass ceramics or Titanium.

Therefore with the **CORiTEC 450i** you acquire a system with accomplished flexibility on the highest level standards in precision and dynamic.

The new user interface „**Remote DENTAL 1.0**“ elates here with easiest operating. With only one mouse click you became perfect milling results.

The fully automated 12-times tool changer allows a complete placement with all necessary tools for all materials.

Optionally the **CORiTEC 450i** can be tethered to a 12- to 20-times **blank magazine**.

Therefore the **CORiTEC 450i** is adapted to enter the digital dental technology as well for milling centers with additionally standards on high unit output.

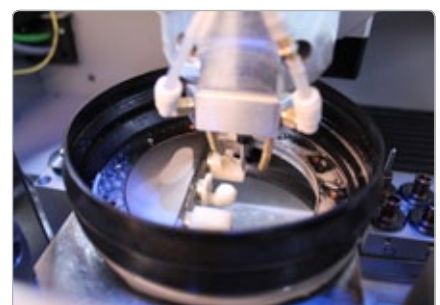
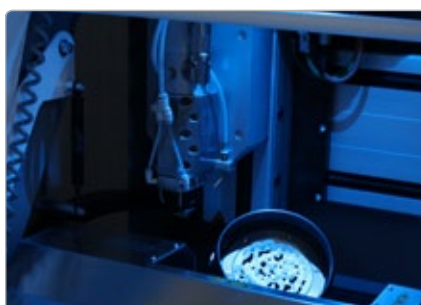
## Applications

Processing of all relevant dental materials with 5-axes-simultaneous processing on every kind of indication.

- » Zirconiumoxide, Aluminiumoxide
- » plastics like PMMA/composite
- » Wax
- » CoCr (optional)
- » glass ceramics, feldspar, lithium disilicate, Titanium (optional)
- » teeth models, boring templates, removable partials

## Highlights

- » 5-axes-simultaneous processing with three linear axes and one rotation-swinging-unit offers full flexibility
- » wet and dry processing allows the machining of all essential dental materials
- » The integrated high-performance-controller guarantees for highest dynamic and speed on optimized precision
- » The full automatic 12-times tool changer including automatic tool-length control allows the complete tool-assembly for all usable materials
- » Tool lifetime controller with report
- » Automatic tool-breakage-control
- » Automatic tool change after wear-out
- » Night-mode: After successful processing the software will shut down automatically
- » incl. control-PC based on Windows 7 with preinstalled control-software "Remote DENTAL 1.0"
- » Automatic control of the suction unit
- » Tri-color LED Interior Lightning
- » Optional with suitable table
- » Optional with blank magazine for up to 20 blanks





### Technology

- › Rigid, industrial, heavy duty steel/aluminium table top design
- › Swinging hood with integrated Gas spring for ergonomical closing and opening
- › 5-axes-simultaneous processing
- › high-performance-servo-controller in combination with powerful 200W motors
- › incl. a compact high-class control-PC in a modern design based on Windows 7
- › modern 19" TFT display
- › High-Frequency-spindle with up to 60.000 rpm
- › wet processing with cooling liquid circuit (optional)
- › blank magazine for up to 20 blanks (optional)
- › Automatic 12-times direct tool changer
- › Integrated high-precision tool length sensor
- › Automatic air-pressure control
- › Rotation-swinging-unit for 4th and 5th axis
- › established blank holder for blanks with a diameter of 98,5mm
- › 115 V/230 V versions
- › Compressed air consumption app. 120 l/ min (min. 6 bar)
- › Weight: 180 kg
- › 730x820x820 mm (WxHxD)

450i blank magazine docked onto machine





# With 5 axes and massive granite construction into a new dimension!

The new **CORiTEC 550i** from imes-icore offers you the high productive dental processing in wet and dry milling with 5-axes-simultaneous processing.

The **CORiTEC 550i** fascinates with its multifunctional production system and is made for laboratories where the metal production plays a big role. Laboratories with the standard on an efficient 5-axes processing find the ideal processing center.

The new axes system with high precision massive granite construction warrants highest running smoothness.

Therewith you achieve best milling results also on hard mill able materials like CoCr. Thanks to the automatic 16-times tool changer and two blank holders with NC-controlled automatic rotation unit it is possible to realize up to 90 units of a material without a blank change.

The powerful high-frequency-spindle with 1,6 kW and 80.000 rpm assures moreover highest precision and long tool durability. The **CORiTEC 550i** is predestined for the manufacturing of all essential dental materials in dry and wet milling like Zirconiumoxide, Aluminiumoxide, PMMA, Wax, CoCr alloys, glas ceramics, feldspar, lithium disilicate Titanium and Titanium alloys.

## Applications

Processing of all relevant dental materials with 5-axes-simultaneous wet and dry manufacturing.

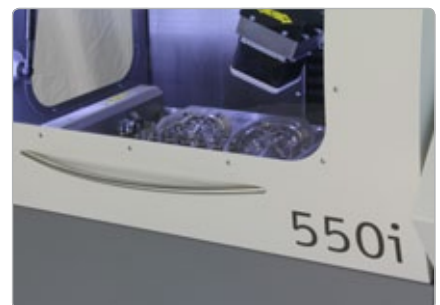
- » Zirconiumoxide, Aluminiumoxide
- » plastics like PMMA/composite or Wax
- » CoCr alloys
- » Titanium and Titanium alloys
- » glass ceramics
- » teeth models, boring templates, removable partials

## Highlights

- » 5-axes-simultaneous processing with 3 linear axes, one rotation and one swing axis
- » wet and dry processing makes it possible to process all essential dental materials and indications
- » The massive granite construction of the whole axis system warrants highest precision and running smoothness
- » complete tool management: 16-tools fully automated tool changer, tool change after wear-out, tool lifetime control, tool measurement, breakage-control
- » integrated control-PC based on Windows
- » up to 90 units of one material without a blank change or 45 units per two different materials without a blank change

## Technology

- > Massive steel-granite construction for highest precision
- > Swinging hood
- > High-End-Servocontroller for fastest processing technology
- > 5-axes-simultaneous processing
- > powerful AC-Servomotor drives in all axes
- > 2 processing stations with cooling water basin
- > powerful 1,6 kW high-frequency-spindle with up to 80.000 rpm and 3-time hybrid ball bearings
- > blow and water cooling system integrated into spindle holder
- > integrated cooling system with a pump in a stainless steel basin and filter device





- > suction device and cooling system
- > Tools with 6 mm shaft
- > full automatic 16-times direct tool changer
- > Integrated high-precision tool length sensor
- > integrated control-PC based on Windows
- > control system I8000
- > 115 V/230 V versions ›air consumption app. 180 l/min (min. 6 bar)
- > Weight: 750 kg
- > 1180 x 1760 x 920 mm (WxHxD)



# The premium class with 5-axes-technology for highest standards!

The **CORiTEC 750i** from imes-core is the ultimate high performance machine for the dental processing in dry and wet milling with 5-axes-processing. The **CORiTEC 750i** baffles through its outstanding precision and productivity. It is the high-end-system for laboratories with premium standards in quality, productivity and flexibility. The massive natural stone construction and the backlash free high precision linear motor drives with Heidenhain length measuring system assure you outstanding precision and dynamic on all materials.

Furthermore the powerful 1,6 kW high-frequency-spindle with 6mm shaft ensures extreme running smoothness of the tool.

Thanks to the full automatic 16-times tool changer and four working stations up to 180 unit of a material can be realized without a blank change.

Also the assembly of different materials is possible. Therefore the **CORiTEC 750i** is designed for the high productive manufacturing of all possible indications in a 24 hour operation cycle.

## Applications

Processing of all relevant dental materials with 5-axes-simultaneous wet and dry manufacturing in highest precision and speed.

- » Zirconiumoxide, Aluminiumoxide
- » plastics like PMMA/composite or Wax
- » CoCr alloys
- » Titanium and Titanium alloys
- » glass ceramics, feldspar, lithium disilicate
- » teeth models, removable partials, boring templates

## Highlights

- » 5-axes-simultaneous processing with 3 linear axes, one rotation and one swing axis
- » wet and dry processing affords the production of all essential dental materials for every type of indication
- » The massive granite construction of the whole axis system warrants highest precision and running smoothness
- » linear motor drives with Heidenhain length measuring system assures highest precision and dynamic
- » complete tool management: 16-tools fully automated tool changer, tool change after wear-out, tool lifetime control, tool measurement, breakage-control
- » integrated control-PC based on Windows
- » up to 180 units of one material without a blank change
- » preferred in bigger laboratories and milling centers as a dynamic high performance production system for 5-axes-processing

## Technology

- » High-strength and restraining granite construction made of massive grinded natural stone in industrial precision with steel base chassis
- » High-End-Servocontroller for fastest processing technology
- » closed swinging hood
- » powerful digital linear motor drives in all linear axes with integrated Heidenhain length measurement system
- » 5-axes-simultaneous processing
- » 4 autonomous of each other working stations
- » powerful 1,6 kW high-frequency-spindle with up to 80.000 rpm and 3-time hybrid ball bearings
- » blow and water cooling system integrated into spindle holder
- » integrated cooling system with a pump in a stainless steel basin and filter device







- > suction device
- > Tools with 6 mm shaft
- > full automatic 16-times direct tool changer
- > Integrated high-precision tool length sensor
- > integrated control-PC based on Windows
- > control system i8000
- > 3Ph/380V version
- > air consumption app. 180 l/min (min. 7 bar)
- > Weight: 1200 kg
- > 1400 x 2000 x 1220 mm (WxHxD)



# Convincing suction technologies!

The extraction systems are on a totally low maintenance and are characterized by a long life. They have been specifically developed for the needs of the machines. The inner Teflon filter cartridge of the CORiTEC iVAC 2 and CORiTEC iVAC cleans themselves automatically at adjustable intervals and are therefore completely maintenance-free. The suction units are designed for durable everyday use on the highest standards. All suction units are automatically controlled by the machine.

	CORiTEC iVAC 2	CORiTEC iVAC eco	CORiTEC iVAC pro	CORiTEC iComp VAC
collecting tray	18,3 l	10,0 l	15,2 l	40 l
control	automated from machine or manually			
suction power [m³/h]	170	133	200	120
voltage [V]	230 / 110	230 / 110	230 / 110	230
power [kW]	1,1 / 2,3	1,3 / 2,7	1,1 / 2,5	1,3
noise level [db] (A)	65	65	64	60
weight [kg]	53	30	50	21
compressor pressure	-	-	-	6,5 bar
dimensions (HxWxD) in mm	720 x 440 x 630	610 x 290 x 485	1000 x 350 x 350	880 x 470 x 640

The **CORiTEC iVAC eco** is the small sister of **CORiTEC iVAC 2**. The only difference is the type of dust filtering as well as the size. At this point the dust will be piped into special developed filter bags which will be replaced regularly. A downstreamed Teflonfilter avoids the losing of remaining respirable dust. The **CORiTEC iVAC eco** is designed for a high standard within a small space.

The **CORiTEC iVAC pro** also gives you like the **CORiTEC iVAC 2** an automated self-cleaning function of the filter. Therefore it is not necessary to replace a filter bag regularly. On those devices merely the dust collecting tray needs to be evacuated within minutes.

The **CORiTEC iCompVAC** offers a strong suction and an oil free compressor in one unit that can be used directly to operate the **CORiTEC** machines 340i, 440i and 450i.

iVAC 2:



iVAC pro:



iCompVAC:





# Sintering at the highest level!



## iSINT M2 – The Classic:

- » Temperatures up to 1600°C
- » Sintering of up to 180 units in up to 3 layers
- » Integrated Touchpanel
- » Safe batterie buffering
- » Selection, start and control of 6 stored programs
- » 230V / 16A / 2200 watts max
- » 115V / 32A / 2200 watts max
- » Available in beige and grey



## iSINT HT-S – The Compact:

- » Temperatures up to 1600°C
- » Sintering of more than 25 units in 1 layer
- » Emergency cooling function independent of mains supply avoids damages to the appliance in case of mains failure
- » Memory for 9 individual heating programs
- » Easy, menu-driven operation
- » 4 MoSi2-heating elements (designed for 1800°C)
- » Microprocessor controlled temperature



## DEKEMA Austromat μSiC – HighTech meets Design

- » Temperatures up to 1600°C
- » Sintering of more than 80 units in up to 3 layers
- » Approved AUTODRY- system guarantees precise drying from 50°C and fast cooling from 1000°C
- » Shortening of average sintering time by about 30%
- » Selection, start and control of 10 stored programs



## iSINT HT – The Standard:

- » Temperatures up to 1600°C
- » Sintering of more than 60 units in up to 2 layers
- » Emergency cooling function independent of mains supply avoids damages to the appliance in case of mains failure
- » Memory for 30 individual heating programs
- » Completion time adjustable by weekday and time, automatic calculation of the starting time
- » Easy, menu-driven operation
- » 6 MoSi2-heating elements (designed for 1800°C)
- » Microprocessor controlled temperature






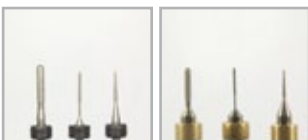
# First-class precision thanks to excellent materials!

imes-icore materials	Available blank sizes D x H (mm) / colors	Properties
<b>CORITEC Zr Disc</b> (isostatic pressed): 	98x10 98x12 98x14 98x16 98x18 98x20 98x25	» full-ceramic material for highest aesthetic claims » extremely high bending strength values » high hardness » excellent mechanical qualities » perfect fitting of all restorations up to large bridges » unlimited biocompatibility » resistance to ageing
<b>CORITEC Zr transpa Disc</b> (isostatic pressed): 	98x10 98x12 98x14 98x16 98x18 98x20 98x25	» Aesthetics milled from solid blanks » The increased light transmission and optimal microstructure for a special infiltration behavior. Coloring-liquids provide exclusive, fully anatomical results.
<b>CORISHADE</b> Coloring liquids 	Grundfarbe A 150ml Grundfarbe B 150ml Grundfarbe C 150ml Grundfarbe C 150ml	» aesthetic color effects » it is easy to get the common spectrum of natural teeth through dilute the liquids » no negative influence of the mechanical properties » no white gingival borderline » perfect coloring of all kinds of constructions made of CORITEC Zr
<b>CORITEC PMMA:</b> 	98x20 Colors: A1, A2, A3, A3.5, A4 B1, B2, B3, B4 C1, C2, C3, C4 D2, D3, D4 BL1, BL2, BL3, BL4 transparent	» excellent mechanical properties » aesthetic color effect » very good suitability for allergy sufferers » very high economic efficiency » temporary crowns » temporary bridges » temporary solutions for the implantology
<b>CORITEC Wax Disc</b> 	98x18, light grey 98x20, light grey	» very well millable » cauterisation without remains » speedable » very high economic efficiency » Wax technology for Wax-Up's
<b>CORITEC Training Disc</b> 	98x14, beige 98x20, beige	» very well millable » optimal usable for milling tests or calibration bodies. » Usable for checking the fit. » tooth-like contrast thanks to the beige coloring
<b>CORITEC CoCr Disc</b> 	98 x 10 98 x 12 98 x 15	» excellent mechanical properties » very good thermal properties » perfect precision of all restorations up to 16 unit bridges » highly biocompatibility » high corrosion resistance » crowns and telescoping » primary/ secondary crowns » constructions for implantology
<b>CORITEC Ti Disc (Grade 2)</b> 	98 x 10 98 x 15	» excellent mechanical properties » high hardness and bending strength values » perfect fitting of all restorations up to large bridges » high corrosion resistance » crowns for front and molars » for all kind of restorations up to 16 units

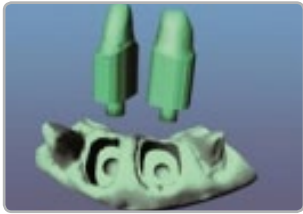
# First-class precision by excellent milling tools!



For every type of milling machine and every material specifically developed and tested milling tools with optimized properties. The milling tool is the key contact point between your milling machine and the dental material and therefore highly important for your success. Cutting parameters of the burr and the settings of the milling machine have to match perfectly for optimum results. With our combined know-how in milling technology and materials science we have further optimized the process for maximum quality and productivity. All **CORiTEC** milling tools will be already delivered with mounted fixation-ring. All tools will be available as 3mm shaft and 6mm shaft.

	tool Ø	Application
<b>standard tools</b> 	2,5 mm 1,0 mm 0,6 mm	The specialized cut shapes ensure best surfaces for Zr, PMMA, Wax up to 25 mm blanks.
<b>Zirconium oxide tools diamond</b> 	2,5 mm 1,0 mm	The highly wear-resistant special diamond coating allows enormous lifetime! Designed especially for Zr and Al up to 25 mm blanks.
<b>metal-tools for CoCr / Ti</b> 	3,0 mm 2,0 mm 1,0 mm	The specialized coating as well as the particular cut shapes are designed for the heavy duty milling in CoCr or Ti. Up to 15 mm blanks.
<b>Glass-ceramics grinding tools</b> 	2,5 mm 1,0 mm 0,6 mm	The special abrasion-resistant galvanic diamond coating provides best surface quality with long lifetime. Especially designed for glass-ceramics up to 15 mm block height.

imes-icore ensures continuous development of the CORiTEC CAD / CAM system. We guarantee our customers a continuous updating in order to achieve always technically and economically the best possible results with the system.



**Dental Shaper:** Dental Shaper is a software plug-in based on the CAD-software Rhinoceros™.

The software is able to convert many different CAD dental formats into the free stl-format. With stl files it is possible to produce dental restorations with nearly each open CAD/CAM-System.

Following file-formats are currently supported:

- » .c3s (z.B. Procera™)
- » .cdt , .sdt (z.B. Sirona™)
- » .cof, .xtl (z.B. Sweden&Martina™)
- » .nmdl, .scn, .ftp (z.B. Etkon™)
- » .art (z.B. Cercon™)
- » .dcm (z.B. 3shape™)
- » .box, .cad (z.B. Cyrtina™)
- » .stl (free STL data from different CAD-Systems)



**Bars:** imes-icore already offers the possibility of producing bars on different implant systems. The required milling tools for production of the abutment interfaces were developed specifically for these applications. For the production of bar constructions generally a 5-axis milling-machine is required.



**Milling models:** In the future all 5-axis milling-machines from imes-icore will get the possibility of producing models. imes-icore will develop suitable materials and appropriate milling strategies and tools which allow the laboratory technically and economically, to produce models with their CAD/CAM-system.



**VITABLOCS®:** Since 2010, imes-icore cooperates with VITA. VITA is known as a supplier of high quality products in the dental industry. Together with VITA it was possible to realize the processing of VITABLOCS® at imes-icore milling machines.

Within this possibility another milestone has been set. It allows our customers to use imes-icore's milling machines more and more as a flexible production center. In the future VITA-BLOCS® are also available at imes-icore.



**2CONnect (nt-trading):** With the 2CONnect system it is now possible to use two types of connections with only one type of abutment system. Within this system, adhesive bases belong to the past in the sector of CAD/CAM manufactured abutments. The 2CONnect abutments are made for production of individual bar- and bridge-construction and are fully compatible with the 3shape Abutment Designer™.

The following Implant-systems are currently covered:

- » E-series - compatible to Nobel Biocare Replace Select®
- » F- series - compatible to Nobel Biocare™ Nobel Active™
- » H- series - compatible to Biomet 3i Certain®
- » L- series - compatible to Straumann Bone Level®
- » N- series - compatible to Straumann SynOcta®
- » R- series - compatible to Zimmer Tapered Screw-Vent®
- » S- series - compatible to Astra Tech OsseoSpeed®
- » T- series - compatible to Dentsply-Friadent Frialit/Xive®



# Upgrades for your existing system!

During the development of the new systems with new technologies, imes-icore also offers to upgrade your system to the newest technology, if possible. Get in contact with us for technical clarification if you will have a specific not listed request.



**Remote DENTAL 2.0:** For all existing machine types 340i, 440i, 2100, 4030  
Advanced features make the control software easier and better! Please ask for our information-flyer!



**iCAM V4:** For all machine types from imes-icore!  
Expand your possibilities of your existing milling system! Read more at page 6 and 7.



**Quick-release-ring with nonius:** For all machine types from imes-icore!  
Save 60 seconds at each blank change! The nonius scale with its 1/360 degree marks allow advanced features with iCAM V4!



**Glass-ceramics-holder:** For all machine types from imes-icore which are made for wet-processing!  
Grind glass-ceramics with your existing system!

Service / Support

## Reliable customer service!

### Completely Local

We are offering the complete solution: Transportation, installation and training right at your location. This is the most elegant solution. Our service technicians deliver on time, your CAD/CAM system is installed properly and your operators are trained accordingly.

### Service & Support

Our highly qualified Service-Team is using future oriented support mechanism like remote access via internet. This way common problems can be discussed together, e.g. explanation of the user surface, controlling the parameters of the milling machine, diagnosing problems and a lot more.

By experience most questions and problems can be solved remotely by this method.

imes-icore offers convenient service agreements including the important machine- and system-maintenance! A system-maintenance directly from the first hand of the manufacturer guarantees a long lifetime of your milling system at consistent high precision!

It is our purpose to assure a trouble free, continuous operation of your system.

**Technical support**  
+49 (0) 6672 898-469

**Materials**  
+49 (0) 6672 898-465

**Sales**  
+49 (0) 6672 898-263  
+49 (0) 6672 898-464



imes-icore sets a new standard with its futureorientated technology. The optimum product line of equipment, software and consumables combined with ambitious service and support guarantee highest productivity and quality.

imes-icore. Makes your smile perfect!



imes-icore GmbH  
Im Leibolzgraben 16  
D-36132 Eiterfeld

Fon: +49 6672 898-228

Fax: +49 6672 898-222

[info@imes-icore.de](mailto:info@imes-icore.de)

[www.imes-icore.de](http://www.imes-icore.de)

