imes-icore®
competence in dental solutions

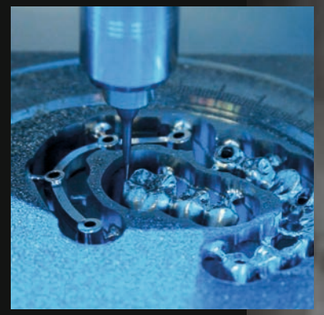
CORiTEC 650i

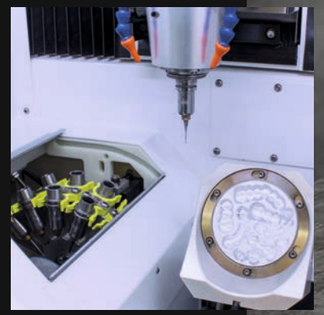
CORiTEC 650i / 650i Loader

WITH FUTURE-ORIENTED TECHNOLOGY

We developed the CORiTEC 650i and CORiTEC 650i Loader machine systems for the area of PREMIUM machines and PREMIUM requirements. The systems are offered with very attractive pricing and are equipped with high-quality industrial milling technologies, such as granite structure, linear drives in the linear axes, torque motors in the rotary axes, as well as digital absolute length measuring systems, and powerful main spindles. The machine concept impresses with its precise, vibration-free and dynamic motion sequences in the demanding and complex metal working processes. All other relevant materials can also be milled or ground with high quality using this machine system.

The CORiTEC 650i loader includes a fully integrated automatic 16-fold blank changer. This enables you to operate the machine system at full capacity around the clock without supervision, while maintaining consistent 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.



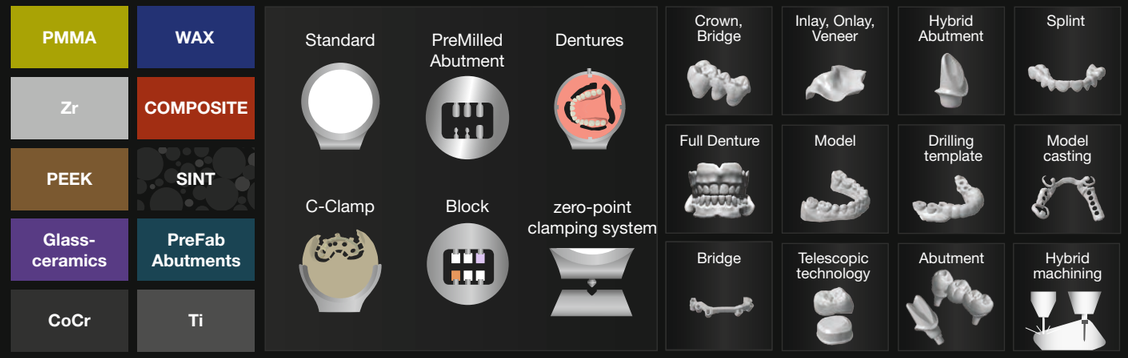


WET
DRY
5 AX
6 mm
32x
16x
ION

CORiTEC 650i

HIGHLIGHTS

- Solid axis construction made of polished natural granite for 5-axis simultaneous machining in high dynamics for high-precision milling results
- absolute, high-resolution measuring systems in all axes (0.5 µm)
- high-frequency spindle up to 50.000 rpm and 3.2 kW power, with HSK 25 tool holder
- high precision due to integrated temperature compensation



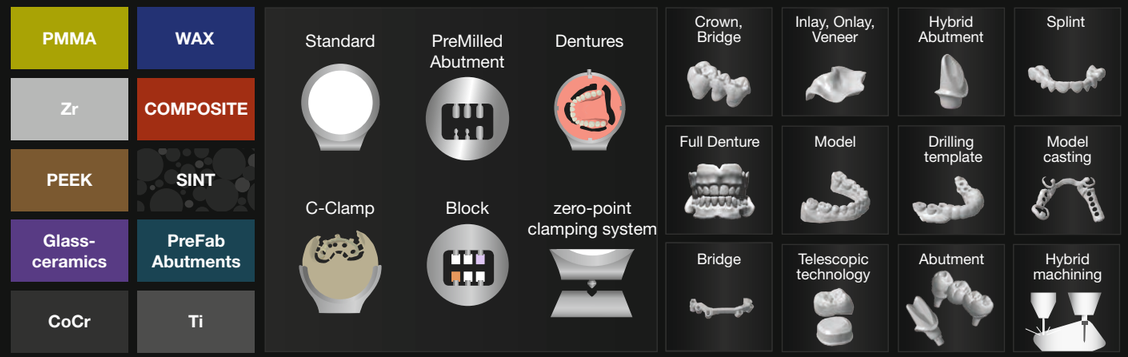
ubervo DENTAL B.V.

Official importeur | distributeur
imes-icore® Nederland

CORiTEC 650i Loader

HIGHLIGHTS

- fully integrated automatic 16-fold blank changer
- production around the clock
- hybrid machining (Precise remilling of SLM work)
- ideally suited for large labs and milling centers
- absolute, high-resolution measuring systems in all axes (0.5 µm)
- high-frequency spindle up to 50.000 rpm and 3.2 kW power with HSK 25 tool holder
- high precision due to integrated temperature compensation



Applications & holder

C-CLAMP

- enables 5-axis machining up to 90 degrees axis adjustment
- extension of the technical possibilities of your milling machine
- end face machining

MANUFACTURE OF DENTAL PROSTHESES

- Baltic Denture from Merz Dental
- Dentsply Sirona Dentures

PREFABRICATED ABUTMENTS

- short production times
- production of abutments in very simple processes
- high accuracy of fit due to prefabricated implant interface

DESS Abutmentholder

NT-Preform® Abutment (nt-trading)

PreFace® Abutment (Medentika)

THERAPEUTIC SPLINTS

- bite splints, bleaching splints
- snoring splints, aligners
- simple and high-quality implementation in CAD/CAM processes

HYBRID MACHINING - SINTERING AND MILLING

- milling post-processing of finished restorations using the SLM method
- high precision milling combined with low-cost SLM process
- compatible with most SLM systems

GRINDING OF CAD/CAM BLOCKS

- new 6-fold adapter enables effective production
- exchangeable strips for different adapter systems
- crowns, onlays, inlays, veneers, bridge frameworks, etc.

IMPLANT-SUPPORTED BRIDGES AND BARS / ONE-PIECE ABUTMENTS

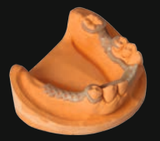
- highest fitting accuracy due to new CAM technologies (ReFit)
- stress-free fit even with larger spans
- easy production due to high degree of automation with coordinated CAM software

BIOHPP ELEGANCE PREFABS

- individual hybrid abutment on PEEK basis
- BioHPP for permanent dentures, free of metal, oxide and monomer
- homogeneous combination of titanium and BioHPP

MILLING OF MODEL CASTS

- production in combustible materials, PEEK or directly in CoCr
- allergy-free and lightweight model casting when using PEEK
- cost-efficient



MILLED IMPLANT MODELS

- DIM (Digital Implant Model) from nt-trading
- precisely positionable
- 2-part implant analog

MODEL MILLING BAUMANN SYSTEM

- model fabrication in CAD/CAM process
- high reproducibility and precision
- model fabrication with digital impression by intraoral scanner

T1/T6 - 3.0 l 6.0 mm
radius milling tool short (l = 15 mm)

T1 Ti
T6 CoCr

up to 15 mm
Blades

Art.-No. 526029 3006

T11 - 2.5 l 6.0 mm
radius milling tool (single blade, slide coated)

T11 PMMA WAX PEEK

up to 25 mm
Blade

Art.-No. 526004 2506c

T2/T7 - 2.0 l 6.0 mm
radius milling tool short (l = 12 mm)

T2 Ti
T7 CoCr

up to 15 mm
Blades

Art.-No. 526029 2006

T11/T13 - 2.5 l 6.0 mm
radius milling tool

T11 PMMA WAX
T13 Zr

up to 25 mm
Blades

Art.-No. 526019 2506

T3/T8 - 1.5 l 6.0 mm
radius milling tool short (l = 12 mm)

T3 Ti
T8 CoCr

up to 15 mm
Blades

Art.-No. 526029 1506

T12 - 1.0 l 6.0 mm
radius milling tool (single blade, slide coated)

T12 PMMA WAX PEEK

up to 25 mm
Blade

Art.-No. 526004 1006c

T4/T9 - 1.0 l 6.0 mm
radius milling tool short (l = 9 mm)

T4 Ti
T9 CoCr

up to 15 mm
Blades

Art.-No. 526029 1006

T12/T14 - 1.0 l 6.0 mm
radius milling tool

T12 PMMA WAX
T14 Zr

up to 25 mm
Blades

Art.-No. 526019 1006

T5/T10 - 1.5 l 6.0 mm
shaft milling tool short (l = 12 mm, four blades)

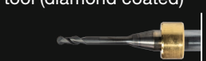
T5 Ti
T10 CoCr

up to 15 mm
Blades

Art.-No. 526002 1506

T13/T40/T50 - 2.5 l 6.0 mm
radius milling tool (diamond coated)

T13 Zr
T40 SINT
T50 COMP



up to 25 mm
Blades

Art.-No. 526013 2506

T14/T41/T51 - 1.0 l 6.0 mm
radius milling tool (diamond coated)

T14 Zr
T41 SINT
T51 COMP

up to 25 mm
Blades

Art.-No. 526013 1006

T19 - 0.5 l 6.0 mm
shaft milling tool (l = 4 mm)

T19 UNIVERSAL

up to 15 mm
Blades

Art.-No. 526001 0506

T15/T42/T52 - 0.6 l 6.0 mm
radius milling tool (conical)

T15 PMMA WAX Zr
T42 SINT
T52 COMP

up to 25 mm
Blades

Art.-No. 526019 0606

T20 - 0.6 l 6.0 mm
radius milling tool (conical)

T20 Ti CoCr

up to 15 mm
Blades

Art.-No. 526003 0606

T16 - 1.5 l 6.0 mm
radius milling tool long (l = 15 mm)

T16 PMMA WAX PEEK

up to 25 mm
Blades

Art.-No. 526019 1506

T21 - 2.5 l 6.0 mm
radius milling tool (diamond)

T21 glass ceramics

Art.-No. 526005 2506

T17 - 1.5 l 6.0 mm
shaft milling tool (l = 15 mm)

T17 PMMA WAX Zr

up to 25 mm
Blades

Art.-No. 526001 1506

T22 - 1.0 l 6.0 mm
radius milling tool (diamond)

T22 glass ceramics

Art.-No. 526005 1006

T18 - 0.5 l 6.0 mm
radius milling tool (l = 4 mm)

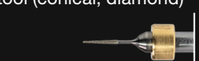
T18 UNIVERSAL

up to 15 mm
Blades

Art.-No. 526026 0506

T23 - 0.6 l 6.0 mm
radius milling tool (conical, diamond)

T23 glass ceramics

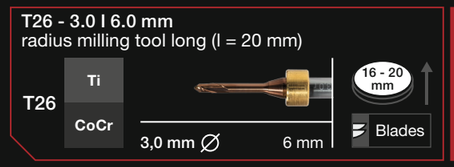


Art.-No. 526005 0606

CORiTEC 650i TOOLS

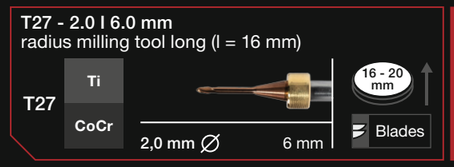
CORiTEC 650i tools

T26 - 3.0 l 6.0 mm
radius milling tool long (l = 20 mm)



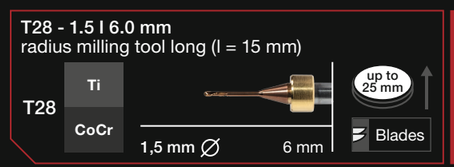
Art.-No. 526030 3006

T27 - 2.0 l 6.0 mm
radius milling tool long (l = 16 mm)



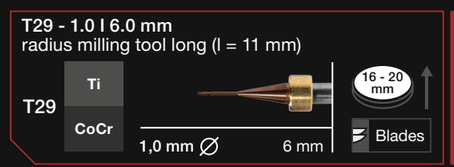
Art.-No. 526030 2006

T28 - 1.5 l 6.0 mm
radius milling tool long (l = 15 mm)



Art.-No. 526030 1506

T29 - 1.0 l 6.0 mm
radius milling tool long (l = 11 mm)

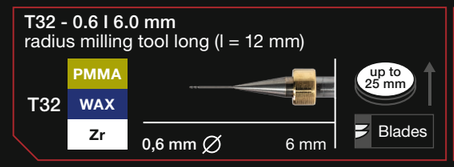


Art.-No. 526030 1006

T30 - 4.0 l 6.0 mm
shaft milling tool long (l = 32 mm, single blade, slide coated)

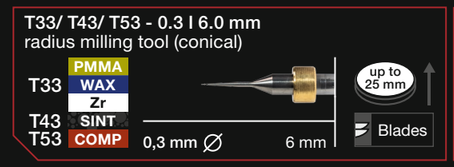
Art.-No. 526012 4006

T32 - 0.6 l 6.0 mm
radius milling tool long (l = 12 mm)



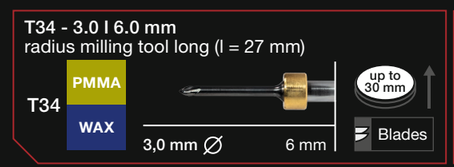
Art.-No. 526012 0606

T33/ T43/ T53 - 0.3 l 6.0 mm
radius milling tool (conical)



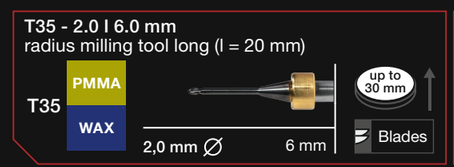
Art.-No. 526019 0306

T34 - 3.0 l 6.0 mm
radius milling tool long (l = 27 mm)



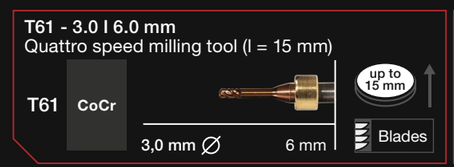
Art.-No. 526012 3006

T35 - 2.0 l 6.0 mm
radius milling tool long (l = 20 mm)



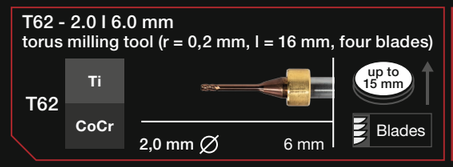
Art.-No. 526012 2006

T61 - 3.0 l 6.0 mm
Quattro speed milling tool (l = 15 mm)



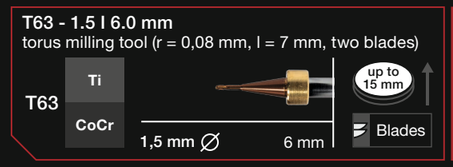
Art.-No. 526025 3006

T62 - 2.0 l 6.0 mm
torus milling tool (r = 0,2 mm, l = 16 mm, four blades)



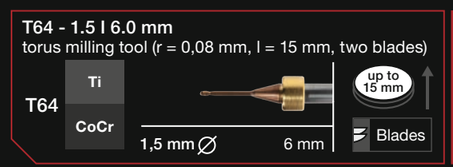
Art.-No. 526025 2006

T63 - 1.5 l 6.0 mm
torus milling tool (r = 0,08 mm, l = 7 mm, two blades)



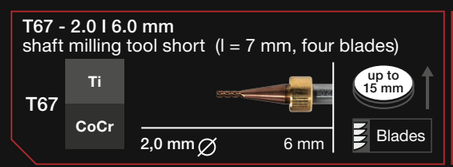
Art.-No. 526025 1506

T64 - 1.5 l 6.0 mm
torus milling tool (r = 0,08 mm, l = 15 mm, two blades)



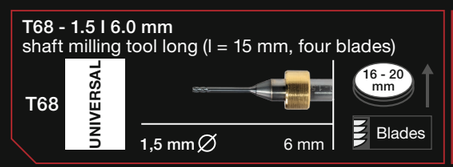
Art.-No. 526028 1506

T67 - 2.0 l 6.0 mm
shaft milling tool short (l = 7 mm, four blades)



Art.-No. 526002 2006

T68 - 1.5 l 6.0 mm
shaft milling tool long (l = 15 mm, four blades)

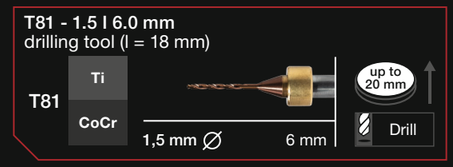


Art.-No. 526021 1506

T80 - 2.5 l 6.0 mm
drilling tool (l = 22 mm)

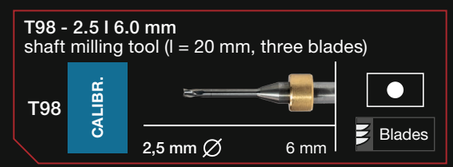
Art.-No. 526023 2506

T81 - 1.5 l 6.0 mm
drilling tool (l = 18 mm)



Art.-No. 526023 1506

T98 - 2.5 l 6.0 mm
shaft milling tool (l = 20 mm, three blades)



Art.-No. 526024 2506

CORiTEC 650i tools

CORiTEC Materials

CORiTEC ZR (ZIRCONIUM DIOXIDE)

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

- highly translucent zirconium dioxide for natural esthetics
- increased strength compared to lithium dioxide

Zr ht+ Disc (highly translucent)

Zr Disc

Zr transpa Disc

Zr transpa Disc (pre-colored translucent)

CORiTEC ZR (ZIRCONIUM DIOXIDE)

- single crowns
- single cap
- bridges up to 16 units, full bridges, and PFM technology
- good mechanical properties
- good milling properties
- corrosion resistant

CoCr Disc (non-precious alloy)

CoCr Mo Disc (non-precious alloy)

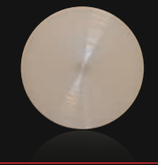
Ti Disc (Grad 2, Grad 4, Grad 5)

CORiTEC MODEL DISC IVORY

- blank for the production of dental models
- low-cost material
- also suitable for test purposes or for milling calibration bodies

JUVORA PEEK (POLYETHERETHERKETONE)

- clamp-retained constructions
- Juvora PEEK in its basic colour (brown-beige)
- highest biological compatibility



CORiTEC WAX DISC (WAX, GRAY)

CORiTEC Wax Disc is not suitable for intraoral application.
After milling, the material can be used as lost wax.
Moulds can be used in casting technology.
It can be milled easily and combusted residue-free.

CORiTEC PMMA (POLYMETHYL METHACRYLATE)

- bite guards, therapeutic splints, drilling templates, bite regulators
- very good mechanical properties
- aesthetic shade effect due to high translucency
- good milling behaviour

PMMA Splint Disc

PMMA Disc

Scanner COMPATIBLE WITH exocad

CORiTEC i3Dscan eco

- all-round carefree package for newcomers or small laboratories
- simple, fast, low-priced
- very compact design

CORiTEC i3Dscan color

- the object to be scanned is automatically guided into the measuring field
- modern touch control design
- the 180-degree opening offers a large working area

CORiTEC i3Dscan color HR

- enormously high scanning efficiency and precision (4 µm)
- Color Texture scan
- Blue-Light LED & High resolution camera (2.8 MP)
- all modules included in the scope of delivery

CAM software

CORiTEC iCAM V5

- all strategies optimized for 5-axis simultaneous machining
- automatic exchange of implant connections (ReFit option)
- no annual license fees
- fully automatic and easy operation with “Wizard Workflow“

Suction systems

iVAC PRO+

The industrial extraction system with brushless motor, volume flow of 280 m³/hr, adjustable capacity, filter system with Teflon filter cartridge and large dust drawer, automatic compressed air self-cleaning is suitable for all dental milling machines from imes-icore®.

iVAC PRO+	
volume flow	280 m³/hr
output	1200 W
filter system	Teflon filter cartridge,automatic cleaning feature
filter volume	15 litres (dust drawer)
width x depth x height	13.8 x 13.8 x 39.4 inch / 350 x 350 x 1000 mm
supply voltage	115 V/230 V
special features	compressed air self-cleaning system

iVAC expert

The iVAC expert is the appropriate vacuum system for the CORiTEC 650i and 650i Loader milling machines. High suction power with 1000m³/hr and 100 liters filter volume and HEPA filter. The brushless turbine guarantees a long service life.

iVAC expert	
volume flow	1000 m³/hr
output	2200 W
filter system	dust drawer, HEPA filter
filter volume	100 litres (filter bag)
width x depth x height	23.6 x 30.3 x 48 inch / 600 x 770 x 1220 mm
supply voltage	230 V
special features	high volume flow for room extraction

Sintering Furnaces

iSINT eco

The **iSINT eco** stands for economy and offers high-quality technology, matching accessories for high standards at a fair price. Compact and with a small footprint, the **iSINT eco** sintering oven still has sufficient capacity for a sintering bowl Ø 100 mm for approx. 25 units. The door stop can be mounted right and left.

iSINT PRO

A larger sintering capacity of up to 80 single crowns is offered by the new **iSINT** PRO. With a heating system with four high-quality molybdenum disilicide (MoSi2) heating elements, you can choose between conventional long-term sintering or SPEED sintering at a rate of up to 99 °C/minute. The **iSINT** PRO is controlled by a simple and convenient program control. The programs are displayed on a 4-line LCD display. A timer function for overnight sintering or the use of pre-drying programs for shaded zirconium restorations offer further options. In addition, three service programs are available for easy maintenance of the sinter furnace.

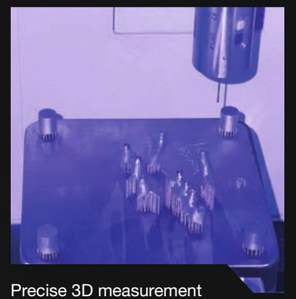
	iSINT eco	iSINT PRO
Number of heating elements	4	4
Display	7-Segment	4-line LCD
Number of program memories	9	30
Combustion chamber capacity	1 x 100	2 x 120
max. heating rate in °C/min	30	99
Power in W	1300	3200
Lift function	No	Yes
Speedsintering	No	Yes

Special solutions Hybrid machining

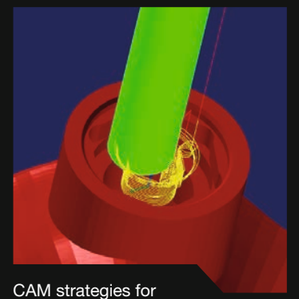
CORiTEC 650i FOR SLM FINISH MACHINING

With the high-precision CORiTEC 650i machine, technology partners have developed a special process to re-mill work that was previously produced in the SLM process with high precision. This allows e.g. build highly complex web constructions made of various materials such as titanium or CoCr in advance in the SLM process, and subsquently rework interfaces with the CORiTEC 650i for the perfect fit and surface finish. This procedure is implemented in a special WorkFlow, in which a 3D probe is integrated in the CORiTEC 650i. The touch probe determines the exact position and position of the SLM building board. Using 3D measurement functions of the CAM software, the fit and interface areas of the restorations on the SLM plate can then be precisely milled with the CORiTEC 650i. This method can be used in principle with any SLM systems and with different CAM systems in combination with the CORiTEC 650i.

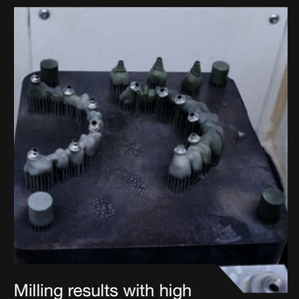
1 SLM system + 2 CAM-Software + 3 CORiTEC 650i milling machine



Precise 3D measurement in the CORiTEC 650i



CAM strategies for precision areas



Milling results with high surface quality

With the 3D probe, a controlled measurement is made via reference points in order to determine deviations, displacements and rotations. In the background, the imes-icore® 3D-measurement software calculates the values and writes them back to the CAM software to implement the corrections.

1

Compatible with among others the following SLM installations:

sisma, eos, TRUMPF, CONCEPTLASER

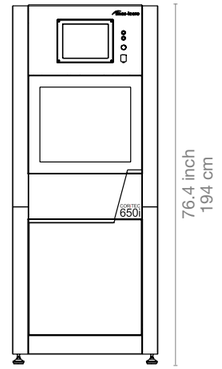
2

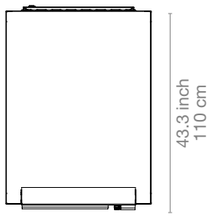
Compatible with among others the following CAM systems:

FOLLOW-ME! TECHNOLOGY GROUP, worknc Dental, CIM system

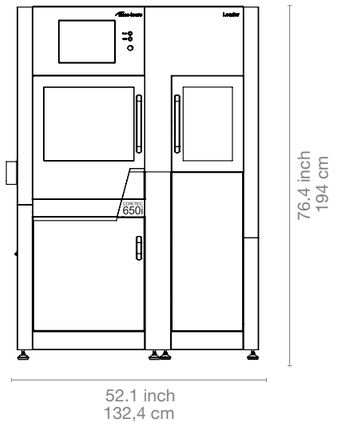
Dimensions

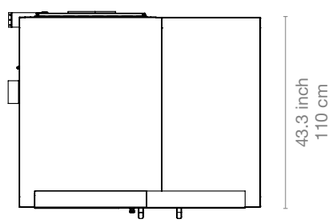
CORiTEC 650i





CORiTEC 650i Loader

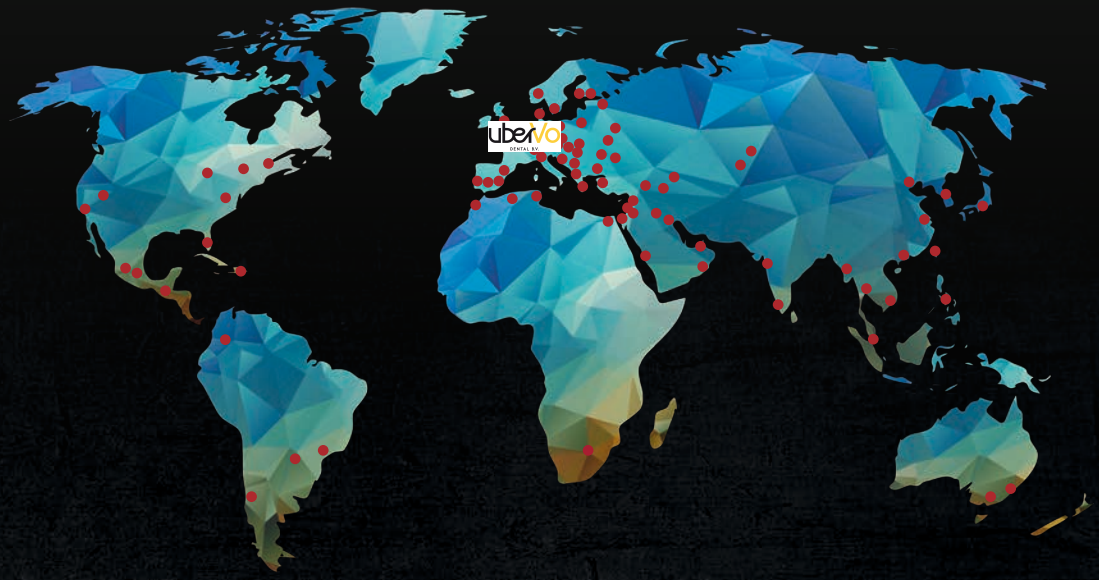




In numbers

	CORiTEC 650i	CORiTEC 650i Loader
mechanics / electronics		
number of axes and operation type	5 axes, simultaneous machining	5 axes, simultaneous machining
rotation angle	A-axis 360°, B-axis 130°	A-axis 360°, B-axis 130°
spindle / power	high-frequency spindle / 3.2 kW	high-frequency spindle / 3.2 kW
spindle cooling	water cooled	water cooled
maximum spindle speed	50.000 rpm	50.000 rpm
tools	HSK 25	HSK 25
tool changer	32-fold	32-fold
tool length control	≤ 0.002 mm precision	≤ 0.002 mm precision
blank changer	-	up to 16 blanks
integrated computer hardware	Windows based	Windows based
monitor	integrated 15“ touch screen	integrated 15“ touch screen
illumination	3 LED status colors	3 LED status colors
software	Remote DENTAL 3.0	Remote DENTAL 3.0
air pressure	6 - 9 bar constantly supply, 150 liters/minute	6 - 9 bar constantly supply, 160 liters/minute
cooling liquid	19 Liter integrated	19 Liter integrated
connecting requirements		
weight	625 kg	930 kg
width x depth x height	30.9 x 43.3 x 76.4 inch 785 x 1100 x 1940 mm	52.1 x 43.3 x 76.4 inch 1324 x 1100 x 1940 mm
line voltage / frequency	400 V - 3 stages / 50/60 Hz	400 V - 3 stages / 50/60 Hz

Sales and support partner worldwide



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