

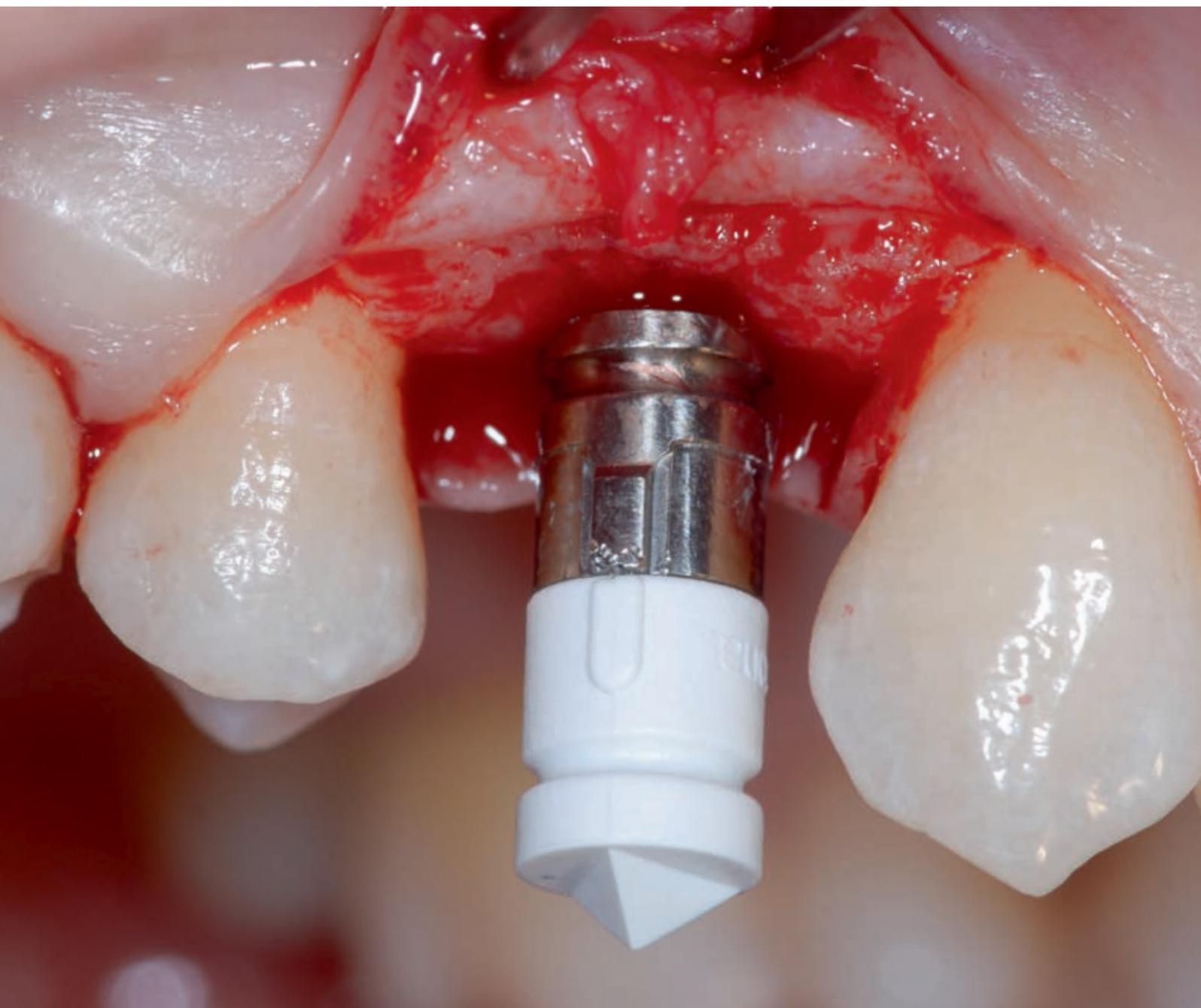
THE DENTAL
SOLUTIONS
COMPANY™



Chairside Implantology

Only CEREC makes it
happen

dentsplysirona.com/CEREC



CEREC Chairside Implantology: safe and individual for your patients



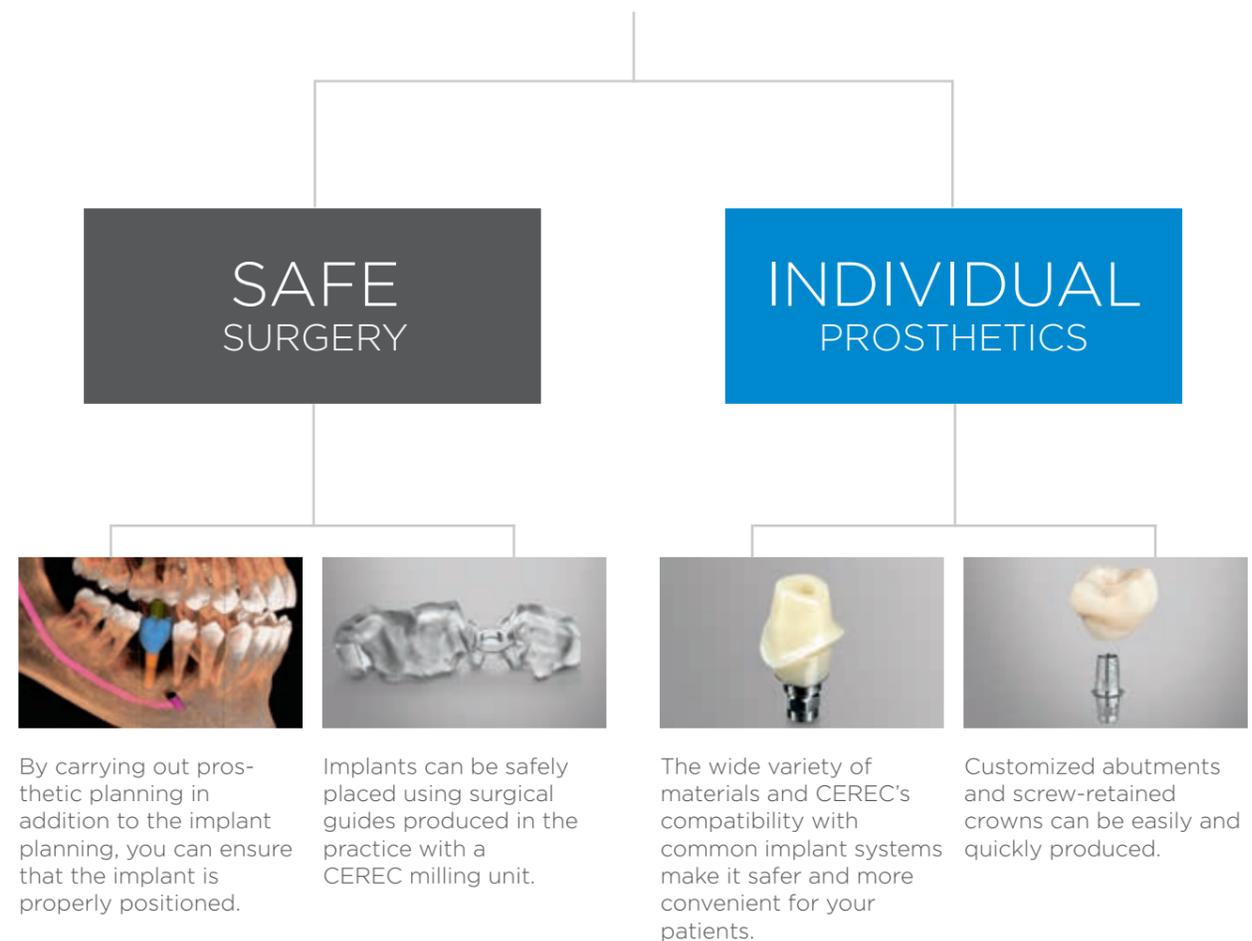
For more than 30 years CEREC has been supporting dentists in the field of restorative dentistry. Today, a CEREC restoration is placed every five seconds in practices all over the world – simply and precisely in just one visit.

But that is not all: CEREC also offers safe and individual chairside implantology. This means CEREC not only enables you to create customized implant prosthetics, but also helps you plan the surgery and insert the implant.

The prosthetic situation can be taken into account even when planning the implant. This ensures that the implant is properly positioned.

The process is carried out with the help of a surgical guide, which can be quickly produced with CEREC in the practice. Even if you do not perform guided implant surgery and only provide the prosthesis, CEREC offers a simple means of making customized abutments and screw-retained crowns. Thanks to CEREC's wide variety of materials and compatibility with most common implant systems, you can offer your patients greater safety and convenience in just one or two appointments - from the implant planning to the final prosthetic restoration. With CEREC you are 100% in control over the entire workflow. The result is an individual and reliable solution tailored to suit both your wishes and demands as well as those of your patients.

CEREC Chairside Implantology

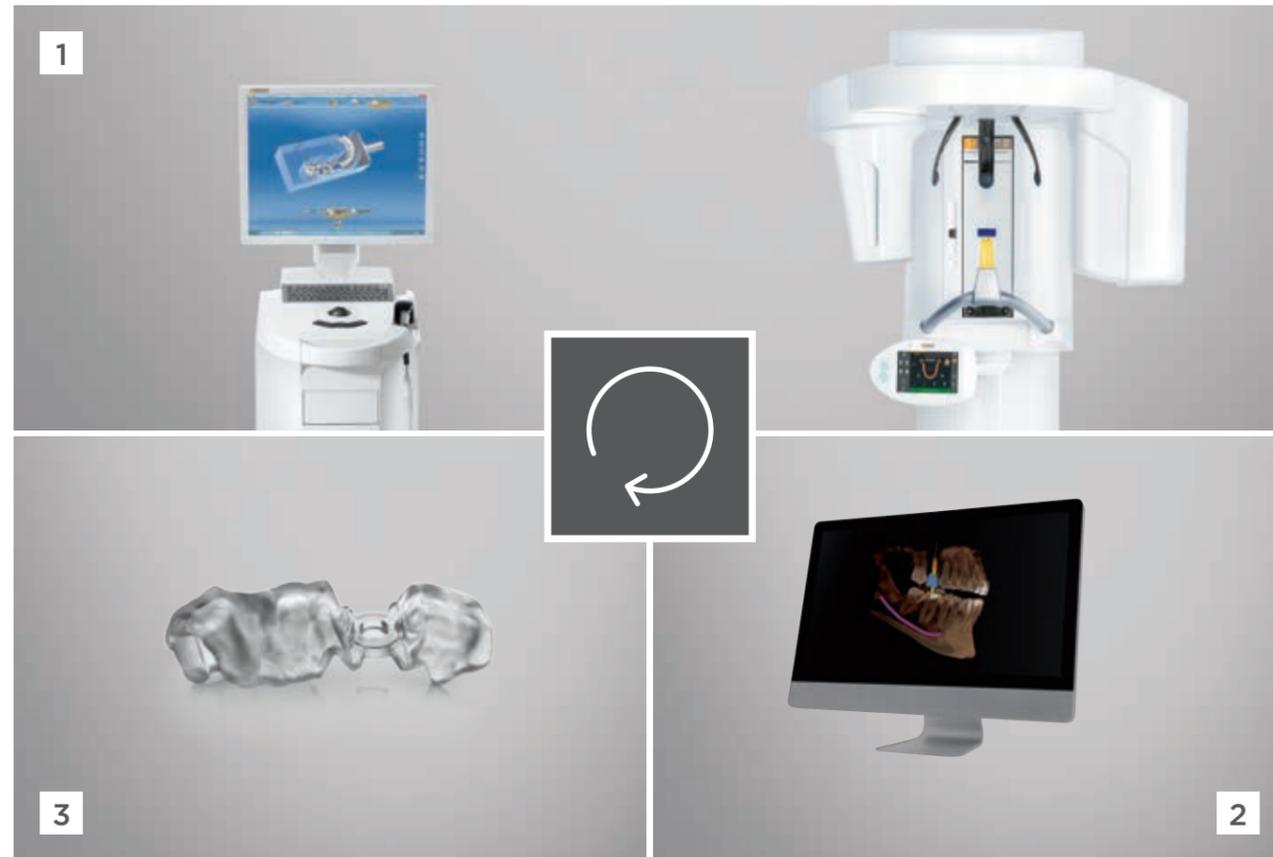


Thoroughly convenient.

"Now, my dentist can carry out the entire implant treatment on his own without having to send me to another specialist. That means the entire process is faster and more convenient for me."

Place implants safely and precisely ...

From the surgical planning and implant placement to the final prosthetics, the CEREC system enables you to cover the entire implantology process in your practice.



- 1 Scan:** In the first step all of the necessary images for planning are prepared: intraoral impressions for the prosthetic proposal and 3D X-ray images for surgical planning.
- 2 Plan:** The Galileos Implant Software then aligns the prosthetic proposal and the X-ray data. With this the implant is planned and a surgical guide produced.
- 3 Place:** The implant is safely placed using a surgical guide. Dentsply Sirona provides the least expensive and fastest produced surgical guide in the world.

... in just one appointment

Thanks to CEREC you also have total control over the final restoration. In just one design step you can produce a customized abutment with matching crown or screw-retained crown. You can also choose from a wide range of materials for the provisional or final restoration. As a result, you can always provide your patients with individually designed restorations with perfect aesthetics.



- 4 Impressions:** The CEREC Omnicam can also make digital impressions of newly placed implants, saving patients the unpleasant experience associated with impression trays. The precise 3D images in natural color make scanning easier, more intuitive and more ergonomic than ever before.
- 5 Design:** The CEREC software analyzes the entire scan and uses it to generate outstanding restoration proposals. Abutments and crowns are easily designed in just one step.
- 6 Milling/grinding:** The CEREC milling and grinding unit and CEREC software are a perfect match. Depending on the indication, a wide range of materials can be used to directly produce temporary or final restorations.
- 7 Sintering/finalization** The world's smallest and fastest sintering furnace, the CEREC SpeedFire, can sinter screw-retained crowns or abutments made of zirconia in approximately 24 minutes.

Clinical protocol (surgical part)

The CEREC system is the ideal way to keep more processes with their added value in your dental practice, whether you only create implant prosthetics or perform the surgery yourself. The case described below only required three treatment appointments for the entire digital implant procedure including the final restoration. The number of appointments may vary from patient to patient, but most cases can be typically

completed with CEREC in just two to three treatments. If you do not place implants yourself, you can of course begin from the prosthetic part of the treatment.

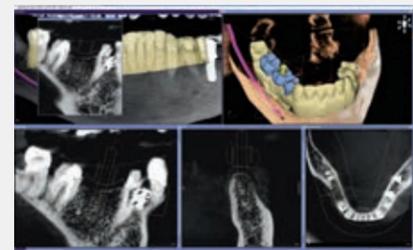
1st appointment



1 In the case described here, a new prosthetic restoration is planned in the 4th quadrant due to secondary caries in a PFM bridge. Instead of reconstructing a new bridge, the aim is to replace tooth 46 with an implant and add two single crowns on teeth 45 and 47.



2 After the insufficient PFM bridge and the preparation have been removed, the 4th quadrant is scanned with the Omnicam and a fully anatomical temporary bridge is constructed on the 3D model. In the same appointment, the temporary bridge is milled with the CEREC MC XL unit (CAD TEMP, Vita) and seated.



3 A CBCT scan (Orthophos SL) is carried out to plan the implant procedure. The bridge construction is used for virtual prosthetic planning; it is transferred to the Galileos Implant Software and integrated with the X-ray volumes. When adding the virtual prosthetic planning to the X-ray image it provides a considerable amount of additional information for planning the implant procedure. The implant can be positioned so that its central axis is perfectly in line with the central occlusion. To design the surgical guide CEREC Guide 2, which is produced digitally in the practice, the size and height of the drilling sleeve will be defined in the Galileos Implant Software.

2nd appointment



4 When the implant planning is ready, it is transferred to the CEREC software, which automatically calculates the surgical guide (CEREC Guide 2); this is then milled from PMMA in the CEREC MC XL milling unit in less than an hour. Afterwards, the fit in the patient's mouth will be checked.



5 Whether access is gained via punch or by raising a flap, CEREC Guide 2 supports both approaches. In this case, after the provisional bridge is removed, a minimally invasive flap design is selected.



7 Using a digital scanpost on the implant immediately after it is placed makes it especially easy to create an impression of its position. With the CEREC Omnicam this process takes only a few minutes and the prosthetic work can continue immediately afterwards. An X-ray image is used to check that the implant is placed properly.

CEREC GUIDE 2:
FULL
CHAIRSIDE
PRODUCTION
WITHIN
ONE HOUR.



6 The CEREC Guide 2 surgical guide is used as a guide to prepare the osteotomy. When it is fully prepared, the implant is precisely and stably placed.

PLACE IMPLANT
AND TAKE A
DIGITAL IMPRESSION
IN JUST
ONE
APPOINTMENT.

THE
PROSTHETIC
ELEMENT
IS TAKEN INTO
ACCOUNT
EVEN WHEN PLANNING
THE IMPLANT.

Clinical protocol (prosthetic part)

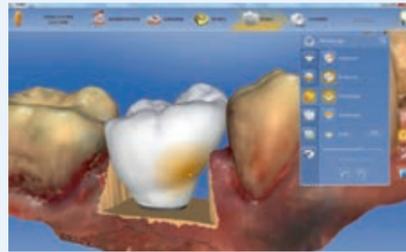
CEREC offers an excellent means of fitting implants with custom-made abutments, crowns or screw-retained crowns in just one visit.



8 The provisional bridge is separated at the two connectors, the link is removed and the two single crowns on teeth 45 and 47 are provisionally bonded using TempBond. The Omnicam is used to scan the scan body with the adjacent teeth and surrounding soft tissue. The virtual 3D model is calculated based on the intraoral scan of the ScanPost, the adjacent teeth and the gingiva. The software automatically recognizes the three-dimensional position of the implant.



9 This is followed by the construction of a screw-retained provisional crown made with Ivoclar's Telio CAD. The emergence profile is adapted according to individual requirements.



10 The provisional restoration is designed so that there is no occlusal contact and only minor proximal contact.



11 The scanpost and scanbody are removed from the implant, the provisional screw-retained crown is screwed in place and the occlusal screw-hole is provisionally sealed. The partially mobilized flap is adapted to the provisional screw-retained crown with two sutures.

FULLY AUTOMATED DESIGN

OF CUSTOMIZED
ABUTMENTS AND
SCREW-RETAINED
CROWNS.

3rd appointment



12 After the healing phase the provisional restorations are removed. The emergence profile is perfectly formed and the implant does not need to be scanned again. The original design of the screw-retained crown can also be reused with minor adaptations to the occlusal and proximal contact points.



13 During the same appointment, the screw-retained crown is milled from a block of lithium disilicate ceramic (e.max CAD, Ivoclar). After it is crystallized and the color characterized, the screw-retained crown is bonded to the TiBase and placed. Once the crown is firmly bonded, the screw hole is sealed occlusally using a composite filling.



14 The X-ray image shows the final situation. The two crowns made of Ivoclar's e.max CAD LT are also bonded on tooth 45 and 47.

CREATE THE
FINAL RESTORATION
WITH NO
FURTHER
IMPRESSIONS.

Conclusion

The case shown here, which was carried out in just three appointments, demonstrates how simple and fast it is to perform digital implantology treatments using CEREC. The safe process and individual prosthetic restoration result in a functional and esthetic excellence.

The advantages of CEREC Chairside Implantology

SAFE	INDIVIDUAL	FAST
INCREASED CLINICAL SAFETY	INDIVIDUAL PROSTHETICS	FEWER APPOINTMENTS

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> • Increased clinical safety due to custom made prosthetics • Digital implant planning taking into account surgical and prosthetic aspects • Guided implantology with CEREC Guide 2 • Total control from planning to final restoration | <ul style="list-style-type: none"> • Custom-made abutments or screw-retained crowns • Natural appearance thanks to tooth-colored abutment • Specific Emergence profile for each patient • Compatible with the most common implant systems • Wide range of materials | <ul style="list-style-type: none"> • Implant restorations in a single visit • Fewer patient appointments • CEREC Guide 2 produced within an hour • Re-use of the design for the final abutment or screw-retained crown |
|--|--|--|



“With CEREC you can not only place an implant safely, but also offer every single patient an individual treatment. But the best thing is that I save a great deal of time by producing everything in my practice.”

Dr. Carlos Repullo BDS, DiplmpDent, Seville



“Without CEREC, implant treatment was very time-consuming. Today we offer everything in one appointment.”

Dr. med. dent. Hendrik Zellerhoff, Laer

The cover image of this brochure was provided with the kind permission of Dr. Carlos Repullo.

Facts & figures



CEREC AC – the mobile cart version
 CEREC AC with Omnicam is comprised of a camera system, PC and monitor in a compact acquisition center on 4 wheels for digital impressions. You can scan and design centrally with the CEREC AC.



CEREC AF – the flexible tabletop model
 CEREC AF comprises the individual components of CEREC Omnicam including a camera tray and PC monitor. You can choose a 19" or 24" screen or use the one from your own practice. The camera can be easily taken from one treatment room to another.



CEREC AI – the integrated, ergonomic version
 With the CEREC AI, Sirona now offers a suitable solution: It consists of a CEREC Omnicam with a tray that is integrated into the TENE0 treatment center by means of a separate support arm and PC with screen.



CEREC SpeedFire

- Speed sintering of full-contour zirconia: the extremely fast processes make single-visit treatment possible
- Speed + Pre-dry: wet-milled restorations can also be created in one process
- Maximum sintering temperature: 1600°C
- Speed Glaze process: fastest glazing process in less than 9 minutes
- Maximum warm-up speed 300°C/min – no preheating or holding temperatures required
- Active cooling of the furnace, chamber and restoration: shortened waiting time through active cooling
- Interfaces: 2x USB 2.0, 1x LAN (RJ45), WLAN (optionally via WLAN USB dongle)



CEREC MC X

- Entire range of chairside indications with up to 40 mm block size, incl. bridges and abutments
- Precise and fast
- Optional upgrade with the CEREC Premium software
- CEREC Guide 2 surgical guides



CEREC MC XL Premium package

- Complete spectrum of chairside and labside indications with block sizes up to 85 mm
- Grinding/milling of all CEREC & CEREC Premium indications and materials
- Precise and fast
- Convenient: four motors and a user-friendly touchscreen
- CEREC Guide 2 surgical guides
- Optional "extra-fine" grinding



Galileos Comfort Plus

- Fully flexible thanks to large spherical volumes of 15.4 cm
- Face scanner can be integrated
- Can be perfectly combined with integrated software solutions



Orthophos SL 3D

- Direct Conversion Sensor (DCS) for unparallel image quality
- Fully flexible thanks to volumes of 5 x 5.5 cm to 11 x 10 cm
- HD scans with a resolution of up to 80 µm



Orthophos XG 3D

- CSI sensor for reliable image quality
- Volumes of 5 x 5.5 cm to 8 x 8 cm
- HD scans with a resolution of up to 100 µm

Wide range of materials and implant systems

CEREC allows users to work with a wide range of materials and is compatible with many different implant systems. You can use silicate, zirconium oxide and hybrid ceramics with a variety of applications from Dentsply Sirona and other well-known manufacturers such as Ivoclar Vivadent und VITA. The result: customized abutments and crowns made of the highest-quality materials.

Selection of our own materials



Dentsply Sirona offers you a broad range of high-quality zirconia blocks.

Selection of our material partners' materials



For even greater individuality, you also have access to our material partners' materials when making provisional and final restorations.

Supported implant systems

Implant system	Platform			
Dentsply Sirona	AstraTech Osseospeed EV	3.0 3.06 4.2 4.8 5.4		
	AstraTech OsseoSpeed TX	3.5/4.0 4.5/5.0		
	Ankylos Frialit/Xive	C/X 3.4 3.8 4.5 5.5		
	BioHorizons	Internal connection	3.0 3.5 4.5 5.7	
		Biomet 3i	External hex	3.4 4.1 5.0
			Certain®	3.4 4.1 5.0
Camlog	Screwline	3.3 3.8 4.3 5.0 6.0		

Implant system	Platform		
Camlog	Conelog	3.3 3.8 4.3 5.0 4.5 5.2	
	Medentika	Medentika Implant	3.5-5.0
		Nobel Biocare	Trilobe connection
	Conical connection		NP RP
	Branemark®		NP RP
Osstem (USA: Hiossen)	Osstem TS	Mini Standard	
	Straumann	Tissue Level	NN (3.5 mm) RN (4.8 mm) WN (6.5 mm)
Bone Level		NC (3.3 mm) RC (4.1 mm/4.8 mm)	
		Thommen Medical	Element, contact
Zimmer	Tapered screw vent		3.5 4.5 5.7

Next step: experience CEREC live.
 Registration and additional information at www.dentsplysirona.com/CEREC



Dentsply Sirona

Sirona Dental Systems GmbH
Fabrikstraße 31, 64625 Bensheim, Deutschland
dentsplysirona.com

Procedural Solutions

Preventive
Restorative
Orthodontics
Endodontics
Implants
Prosthetics

Enabling Technologies

CAD/CAM
Imaging
Treatment Centers
Instruments

THE DENTAL
SOLUTIONS
COMPANY™

