

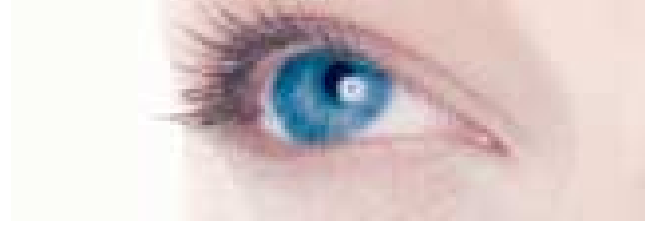
Cercon® offers the full ceramic look that patients dream about - no metal and highly aesthetic.

Cercon® represents your future - with a system that supports your trade, optimises procedures and wins you over with its quality.

Cercon® - the perfect appearance

cercon
smart ceramics®

DeguDent
A Dentsply International Company



Cercon® – a working system for the future. All aspects of Cerconoxid® – a winning material.

Cerconoxid – the new benchmark for stability

Patients nowadays are increasingly deciding on a better optical appearance and are choosing metal-free, biocompatible and highly aesthetic dental restorations based on zirconium oxide. Under the Cercon brand, DeguDent has optimised the material and developed the framework material Cerconoxid. It has also created a comprehensive laboratory system which has already been used to produce more than 1,500,000 dental units.

Cercon offers you a wide range of options...



You can rely on a system with experience

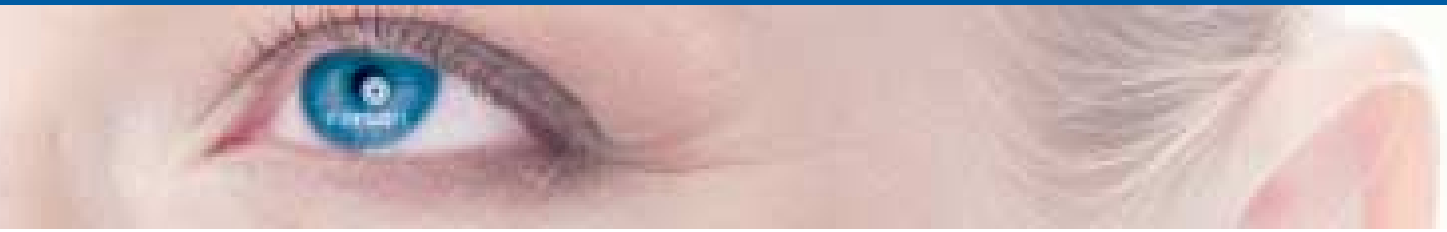
Cercon represents an innovative system solution comprising individual crowns and bridges for the anterior and posterior tooth region. When it comes to equipment, you have a choice between a CAM-aided and a CAD/CAM-aided processing method featuring components which are optimally matched to one another.

Cercon wins people over with its individuality:

Whether you want to prepare simple crown frameworks, complicated bridge geometries or supra-structures, Cercon offers you an optimum degree of creative scope for every indication. Developed for dental technicians, their technical medical knowledge is integrated in an optimum fashion in the way the system functions. Cercon is therefore just as varied and diverse as dentistry itself.

Cercon is also persuasive as a CAD/CAM system:

This first introduction to the possibility of constructing individual dental frameworks in virtual reality describes the path for the future: dental technicians are at the forefront here. The logical nature of the software makes it possible to work intuitively. The navigation device Cercon move supports users here as they view an object on screen – just as if they were holding it in their fingers.



More aesthetics, more biocompatibility

- Cerconoxid ideally satisfies the desire and need from an ever growing number of patients, dentists and dental technicians for more aesthetic options and more biocompatibility.
- Cerconoxid materials Cercon base (white) and Cercon base colored (ivory): along with the matching veneering ceramics Cercon ceram kiss and Cercon ceram press, units are created which have outstanding characteristics and a look totally natural.

... across the entire indication spectrum for fixed restorations

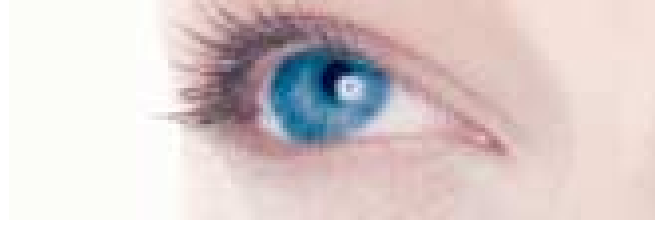


Supreme accuracy in fitting

- Whether it be crowns or bridges – Cercon allows you to achieve an extraordinarily high degree of precision and accuracy in fitting, which is not always the case in the full-ceramic sector.
- Crown and bridge frameworks with a minimum wall thickness (0.4 mm) and interdental linkage (9 mm²) – as with high-strength dental alloys in the area of precious metals.

Supreme strength properties

- Zirconium oxide: the only ceramic which is able to withstand the high masticatory forces in the posterior tooth region. Already tried and tested in industry and medicine.
- High resistance to crack formation owing to changes to the microstructure of the crystal structure.



High-precision tools which add even greater value to your trade.

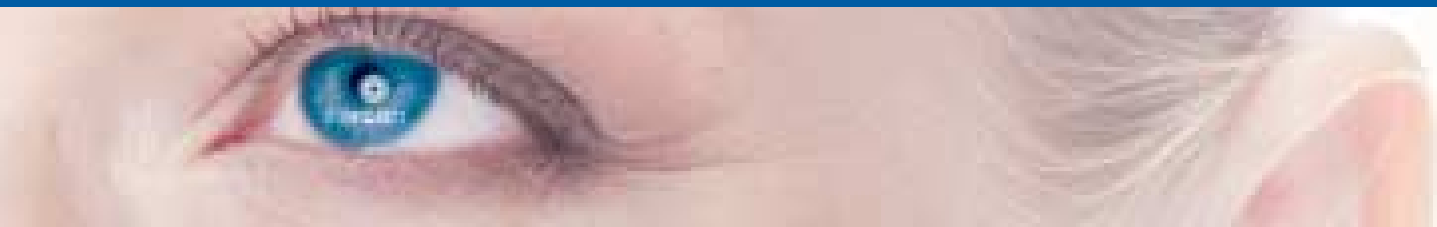
Perfectly matched production steps

The Cercon system is your professional high-tech partner which reliably provides a persuasive result during all production steps. The materials, equipment, times and temperatures are perfectly matched to one another, all computing processes run automatically and noticeably support your skilled work in the laboratory. Better results are what count – whether they are arrived at by traditional means or in virtual reality.



Cercon base, Cercon base colored

- ZrO₂ blanks for crowns and bridge structures with an anatomical length of 12, 30, 38 and 47 mm.
- Available in white and ivory.
- Cercon base 47: specifically designed for bridge structures in the anterior dental arch, also for wide radii and a large posterior dental curvature with a length of up to 47 mm. Also intended for supra-structures in implantology.



Cercon brain

- The perfect unit comprising a laser scanner and milling device. Laser: class II, power 1 mW, precision down to the μm range.
- Preparation of data, calculation of the magnification factor and the conversion in the milling program controlled by software.
- Milling dust is picked up by Cercon clean.

Cercon art

- Hardware and software for the virtual preparation of crowns and bridges.
- Computer-aided construction using Cercon brain, milling with a circular working strategy. High degree of profitability through "nesting":
- several frameworks can be positioned optimally in one relatively large blank.



Cercon move

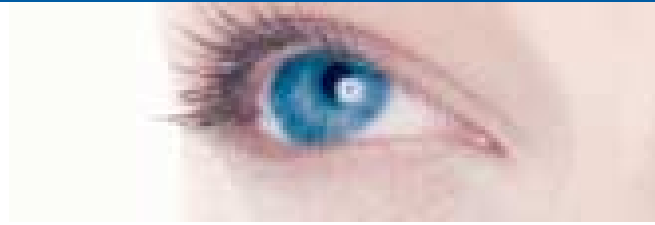
- 3D navigation system – users can examine objects on the screen from all angles.

Cercon heat

- Sintering furnace designed specially for the Cercon system.
- At 1,350 °C the milled objects shrink to their ideal size and strength in around 6 hours. The density of Cerconoxid reaches almost 100 %.



Cercon art – facilitates dental work instead of complicating it.



Traditional or in virtual reality? In any event individual.

You choose the method which best suits your work.

Do you like things to be “traditional”? If you do, you should carry on configuring your crown or bridge framework manually as a wax model. This method is ideally suited to large bridge or connecting element models and also shows you the potential of Cercon. However, you can also choose the virtual alternative and design or model your frameworks on screen.



Scanning using Cercon brain

- The modelled wax object or the individual stump is fixed in the receptacle provided for this purpose.
- Non-contact scanning using the laser.
- Digitisation of the shape, conversion of the data for milling a blank using complex software.



Milling

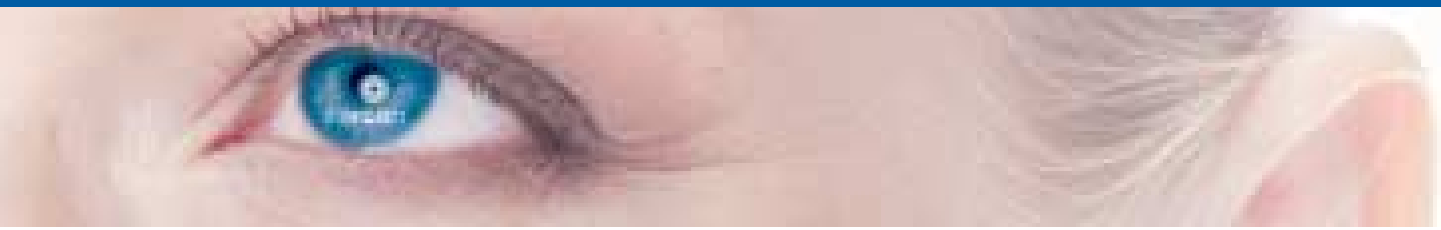
- The milling process is started automatically with the Cerconoxid blank already fixed in place, initially with rough milling and then with fine milling.
- Precise working out of the basal and occlusal side of the framework, with automatic guided movement

The blank



The wax model





Manual reworking

- Release the object from the support frame.
- If desired, very delicate manual corrections can be made at this stage to the substance whose hardness still resembles



Sintering

- Following shaping: sintering of the framework in the Cercon heat sintering furnace.
- This also involves shrinkage to the size prescribed by the wax model or by the virtual configuration.
- The result is a high-strength ceramic framework with a perfect fit and a white or ivory finish.



Joining

The area of indication of Cercon is provided with excellent support by the Cercon link connecting element for divergent bridge abutments. The geometric shape of the plastic mould, developed using a finite element calculation, was matched with its radii especially to the material properties of Cerconoxid. "Safety first" was also the core idea in the development of this system component.

The sintered object



The final result



Attention paid to aesthetics: Cercon ceram kiss and Cercon ceram press.

The veneering ceramics complement the system perfectly

The high level of acceptance among patients is attributable primarily to the aesthetic appearance of a full-ceramic restoration. To ensure that you can achieve this desirable result easily and reliably, particular importance is attached to matching the individual powders to one another. The guiding principle of the system applies here too: every wish is catered for with Cercon ceram kiss, the new veneering ceramic.



Cercon ceram kiss

- Developed especially and exclusively for veneering Cerconoxid frameworks.
- Economical to work with: you can cover a broad color spectrum by combining just a few powders.

Cercon ceram kiss

- All types of teeth can be reliably reconstructed – from young people's teeth to “old teeth”.

Cercon ceram press

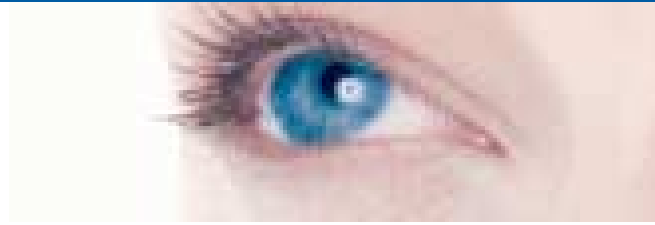
- For veneering Cerconoxid frameworks by means of overpressing – similar to the press-ceramic techniques you are familiar with.





kiss





An inside look at a strong product range: All the good aspects of Cercon ceram kiss.

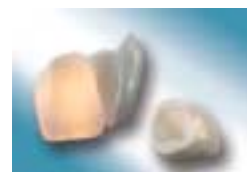
Choose the product range which best suits your work

We provide you with different assortments of veneering ceramic products. The low-cost, extensive starter kit is the ideal choice for newcomers. This fundamental product range forms the basis for the extensive full product range which also comprises paint powders, bleaching powders and gum shades.



Supreme efficiency for ceramic frameworks

- Demand for supreme ceramic quality also met for Cerconoxid frameworks.
- Optimum surface quality – positively supports the revitalisation of the gingiva following embedding.
- Degree of hardness: approx. 540 HVO2, optimally matched to the coefficient of thermal expansion of Cerconoxid. The breaking strength of 70 megapascals (MPa) is considerably above the standard requirement (50 MPa).



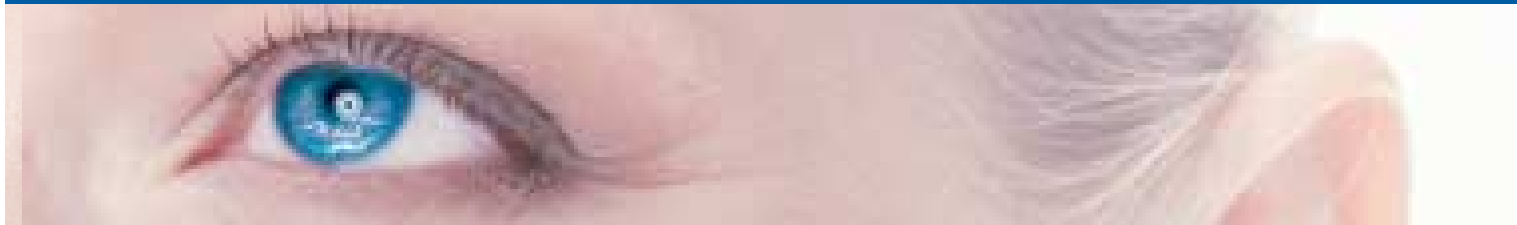
Cerconoxid – translucent and highly aesthetic

Cercon ceram kiss – easy to handle...



...with a perfect result





Results with a totally natural look

If the material Cerconoxid with its purity and semi-translucence offers a creative basis, Cercon ceram kiss allows you to achieve perfection. The standard layering technique itself allows you to achieve highly aesthetic results with a totally natural look. The effect can be improved still further using the light-dynamic powders.

Proven handling offers peace of mind

The Kiss powder and layering philosophy also persuades you of its merits thanks to its outstanding handling characteristics which reliably ensure that you attain an excellent result.



Cercon ceram press...



...for inlay bridges



...for bridges... and...





A smart solution for an innovative material: Cercon smart ceramics – the zirconium oxide full-ceramic system.

Framework material	Zirconium oxide <ul style="list-style-type: none"> ■ Cercon base (white) ■ Cercon base colored (ivory)
Veneering ceramic	Cercon ceram kiss Cercon ceram press
Shading	Using layering or painting techniques
Indications for anterior and posterior teeth	<ul style="list-style-type: none"> ■ Primary telescope crowns ■ Crowns ■ Multi-unit bridges with a max. anatomical length of 47 mm ■ Inlay bridges
Contraindications	<ul style="list-style-type: none"> ■ Bruxism and therapy-resistant parafunctions ■ Bridges with more than two pontics in a row
Temporary cementation	Possible
Permanent cementation	By means of conventional cementation or adhesive bonding techniques

Clear coordinates for optimum results

	Dimensions (W/H/D)	Weight	Power consumption
Cercon brain	850/520/620 mm	Approx. 120 kg	Approx. 750 W
Cercon clean	450/550/500 mm	Approx. 15 kg	Approx. 600 W
Cercon heat	500/520/620 mm	Approx. 80 kg	Approx. 1,600 W
Cercon art PC	200/370/370 mm	Approx. 11 kg	
(Monitor/computer)	369/495/268 mm	Approx. 6.5 kg	
Cercon eye	490/447/569 mm	Approx. 31 kg	Approx. 100 W

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DeguDent

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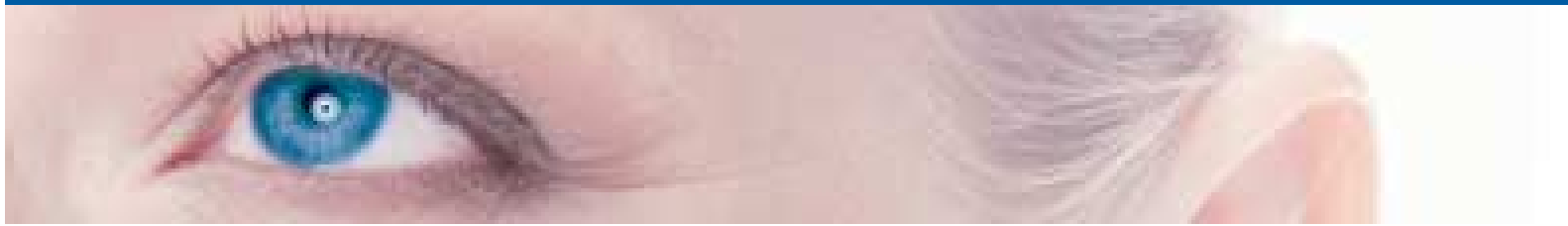
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Do you want to discover more about what Cercon entails? We will be only too happy to give you more details.

Take advantage of DeguDent's full range of expertise

We have of course documented the entire Cercon system for you in thorough detail and summarised it in information brochures. However, when you come to deliberate about where to make investments and what to use in your daily work in the laboratory, there are sure to be further questions which we can answer for you. Just ask – we will be delighted to help.



Advice covering every aspect of your investments

You know your laboratory and your working procedures better than anybody. How would you integrate the Cercon system? Which components can help to improve your working procedures and results? How will you finance things? We can give you the answers you need to these questions too and we would be delighted to offer you very individual advice.

Training covering every Cercon feature

To ensure that you are always on the ball and that you are able to exploit all the opportunities the system offers you, we also offer you a range of measures for your laboratory and practice which support you when you make a purchase.



www.cercon-smart-ceramics.com