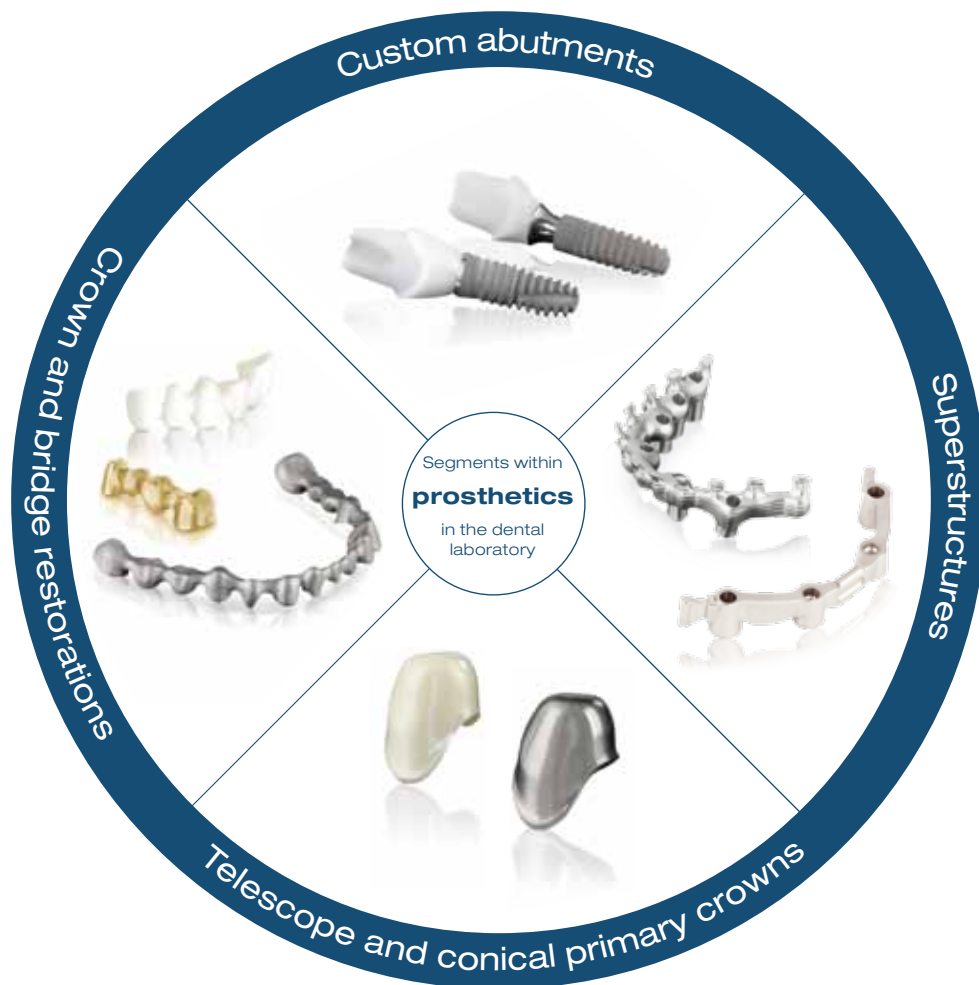


CAD/CAM

Solutions –
flexible, economical, future-proof

What would you like to use CAD/CAM solutions for – today and tomorrow?



Prosthetic materials



Zirconia



Precious-metal dental alloys

What is most important for you when it comes to your CAD/CAM investment?

Flexibility

How important is the flexibility of local and centralized production?

And how important is the availability of a broad range of materials for your prosthetic indications?

Economy

Do you want to fine-tune your custom CAD/CAM solution so your restorations are more economical to produce?

Future safety

What factors will be important for the future of your investment?

System safety

How important is it to have a single partner for your entire CAD/CAM processing chain?

How important is the clinical evidence for your prosthetic materials and solutions?

Service

How important are technical service, support and training for you?



Cobalt-chromium



Titanium



Polymethyl methacrylate

As customized as you want

The DeguDent CAD/CAM system

Scan and design

Production



Cercon eye
Cercon art

3Shape
DentalDesigner



Local production



Central production



Compartis® ISUS planning centers



Superstructures designed to your specifications.

ISUS by Compartis

Prosthetic solutions*

Crown and bridge restorations



Telescope and conical primary crowns



Custom abutments



Superstructures



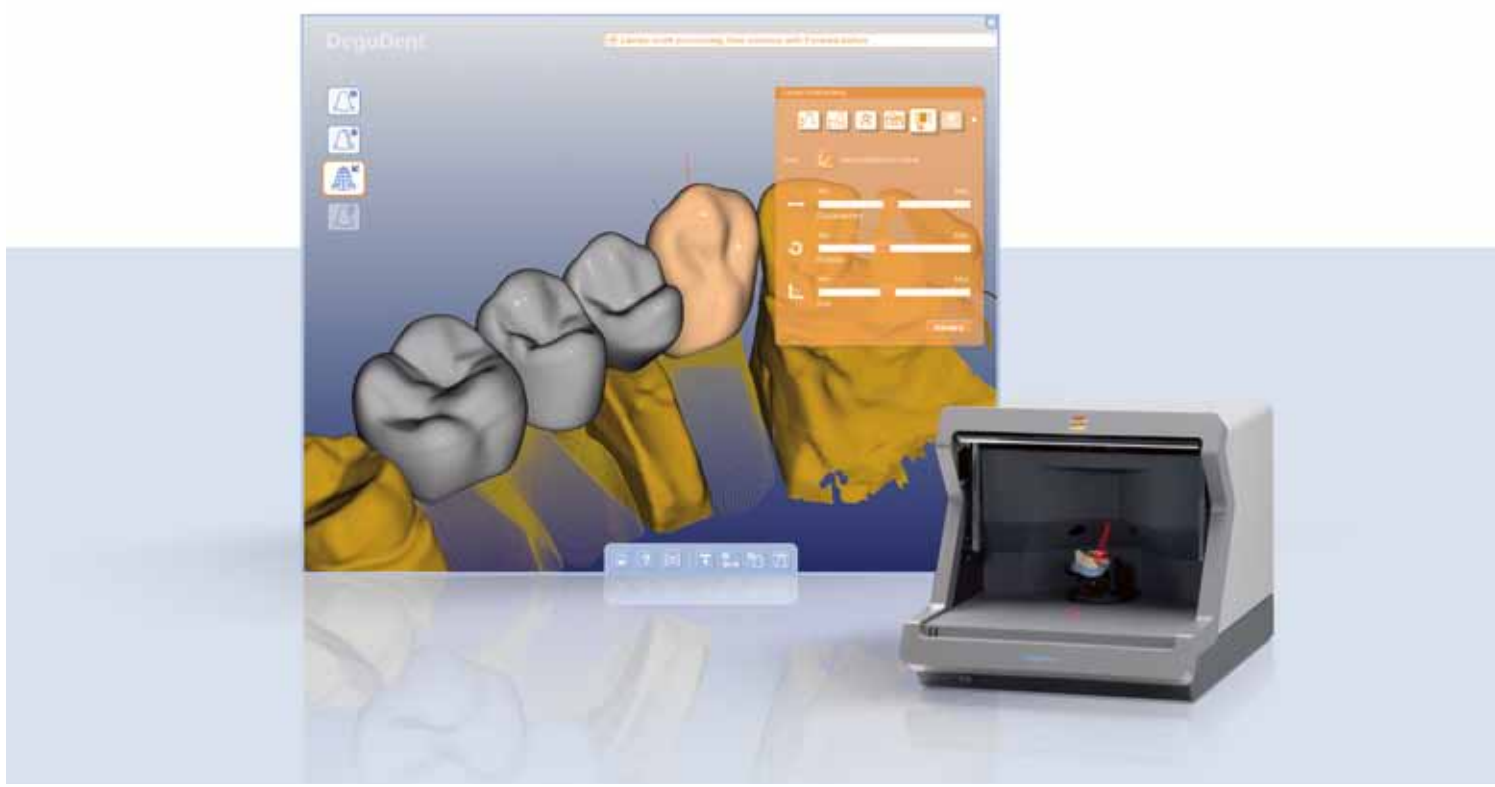
* Not available in all countries. Please contact your local sales representative.

DeguDent CAD/CAM Scan & Design – make your own choice

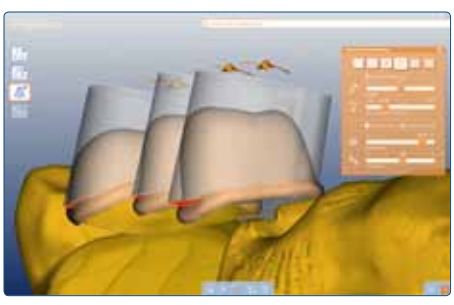
Cercon eye and Cercon art

Intuitive and safe to use

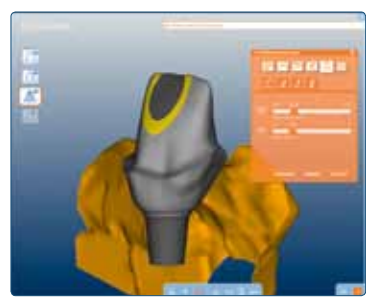
- ✓ Easy-to-understand wizard interface
- ✓ Intuitive settings via slide rules
- ✓ Automatic safety notes and alerts



Indication examples



Telescope and conical primary crowns, designed in 2½ minutes per attachment



One-piece Custom Abutment (ZrO₂, Ti)

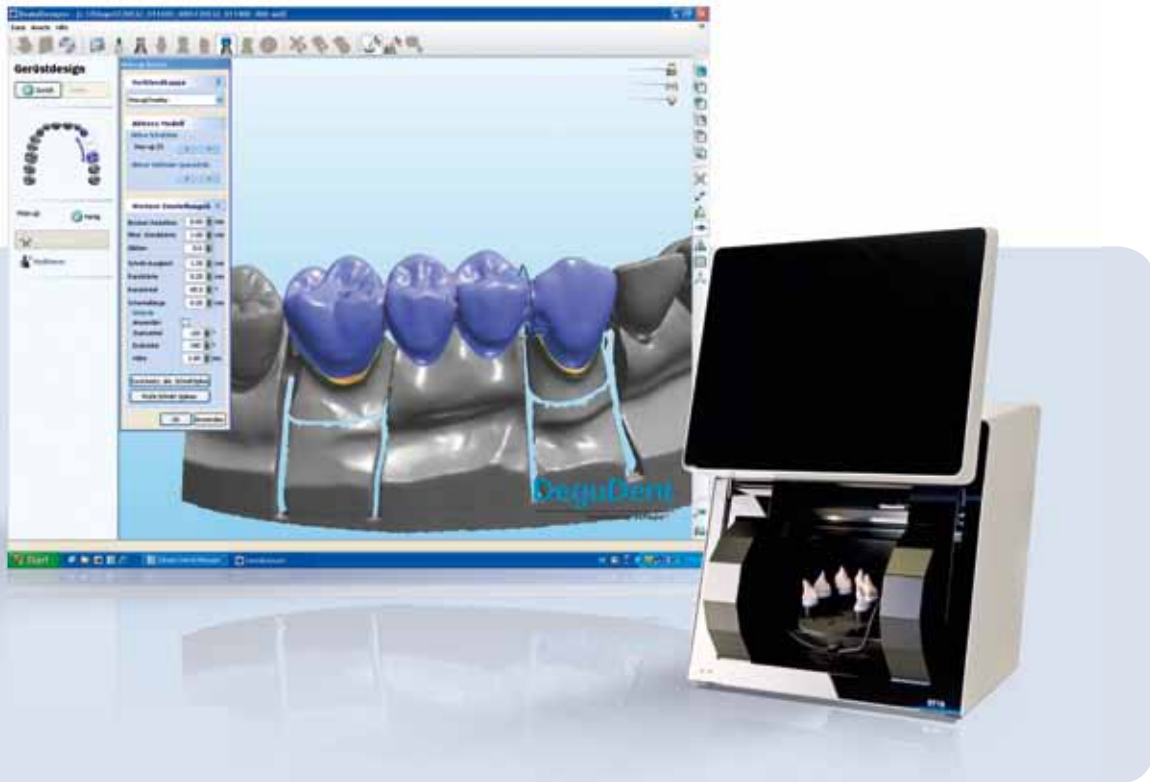


Two-piece Custom Abutment (ZrO₂ copings on a Ti base)

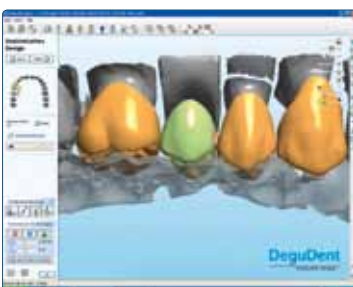
3Shape Scanner and DentalDesigner

Individual and flexible to use

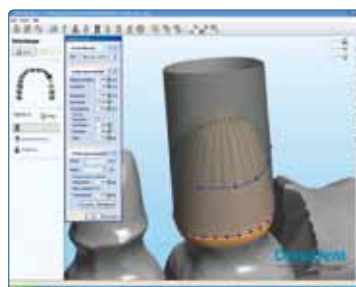
- ✓ Versatile settings
- ✓ Parallel editing of multiple projects
- ✓ Data may be saved as STL



Indication examples



Crowns and bridges to full and reduced (partial) anatomic contour



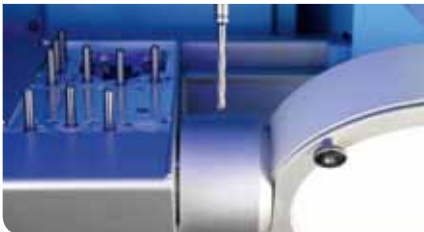
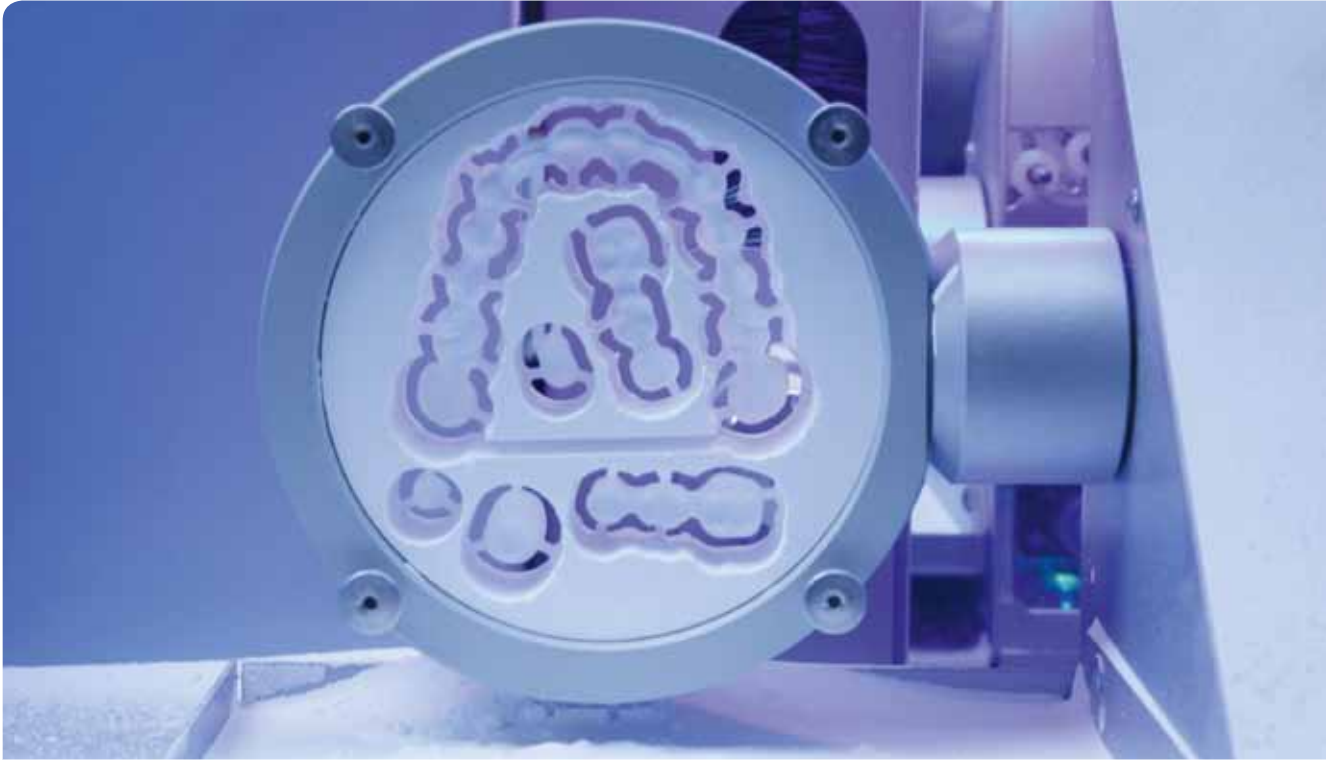
Telescope and conical primary crowns



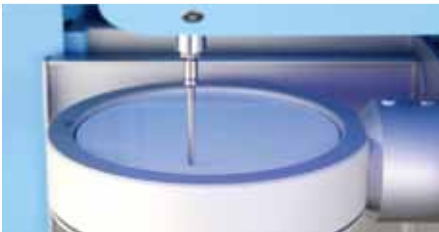
Virtual articulator

DeguDent CAD/CAM solution for your Local production

LOCAL PRODUCTION



Fully automated tool change and control

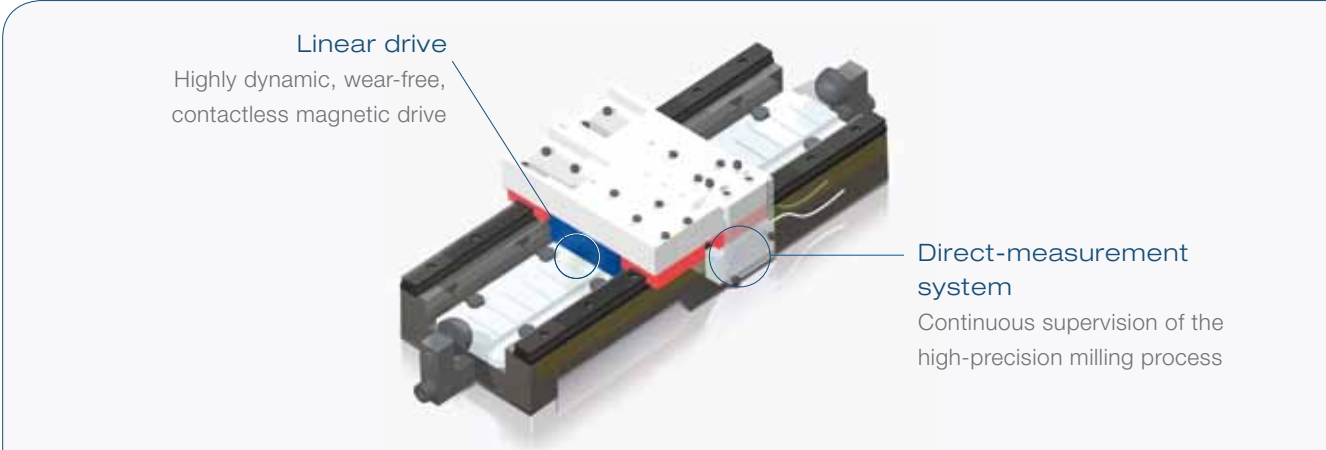


Material-specific milling strategy



Material-specific cutter control

Technological highlights ensure precision



Your benefits

Flexibility

- ✓ Fast production
- ✓ Multiple materials
- ✓ Broad range of indications

Economy

- ✓ Different disk heights and shades
- ✓ Efficient nesting
- ✓ Multi-milling

System safety

- ✓ Synchronized system components
- ✓ Training and education
- ✓ Technical service and support



Materials

Zirconia – Cercon base

Zirconia – Cercon ht

PMMA – Cercon PMMA

PU/Wax – Cercon cast

Indikationen

Primary copings for the double-crown technique

Crown and bridge frameworks

Custom Abutments

Provisional restorations

Cast frameworks

Central CAD/CAM solutions for your
Digital prosthetics



Material-specific industrial production

Automated milling with high-precision milling machines

Selective Laser Melting (SLM)

Industrial-quality precision casting

Your benefits

Flexibility

- ✓ Multiple materials
- ✓ Large range of indications
- ✓ Rapid delivery

Economy

- ✓ Low capital investment
- ✓ Variable costs
- ✓ Attractive prices

System safety

- ✓ Material-specific production technology
- ✓ Industrial quality
- ✓ In-process controls

Materials

Zirconia

Precious-metal dental alloys

Cobalt-chromium

Titanium

PMMA

Indications

Primary copings for the double-crown technique

Crown and bridge frameworks

One- and two-piece abutments

Superstructures

Provisional restorations

Cercon

The good feeling of threefold safety



10 Years
clinical
experience

From raw materials to sophisticated restorations



Your benefits

Validated safety

- ✓ Cercon is as safe as metal-ceramics

Two long-term clinical studies delivered the only clinical proof that the results for Cercon zirconia bridges were comparable to those of metal-ceramic bridges, the gold standard (Sailer et al. 2009). 40-month survival rates were 100%.

- ✓ Cercon offers the broadest range of supported indications

Clinical studies on cantilever bridges (Wolfart et al. 2009) and wide-span Cercon bridges (Schmitter et al. 2009) have demonstrated high levels of safety for Cercon in different indications.

- ✓ Cercon is the only zirconia with a scientifically supported veneering ceramic concept

Cercon is the only zirconia material for which the systemic safety of ceramic veneers has been scientifically studied. Extant studies include in vitro and clinical research, but also naturalistic observations (Rinke, IADR 2010).

Source: Cercon smart ceramics, Scientific compendium Vol. IV



Cercon restoration



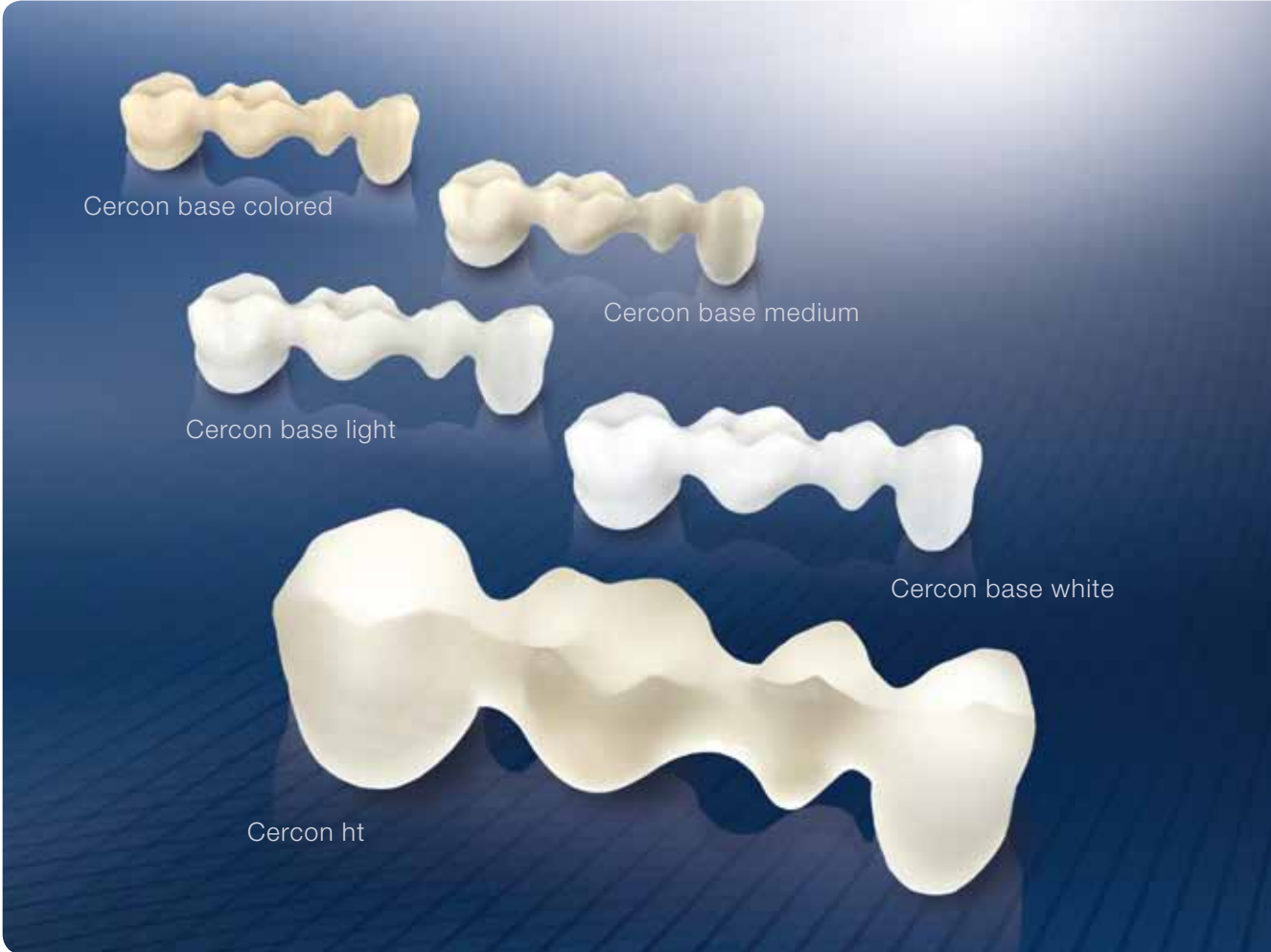
Cercon primary crown



Cercon custom abutments

Cercon

Cercon ht – the next zirconia generation



Cercon ht – the next zirconia generation with outstanding translucency (available May 2011)

Cercon ht and its outstanding translucency



Light transmission of conventional zirconia and Cercon ht

MATERIALS

A reassuring feeling

The next zirconia generation

✓ The material

Cercon ht is based on the yttria-stabilized zirconia material Cercon base, which has been clinically proven for 10 years. With the addition of a minuscule amount of alumina, a modified production process and a sintering temperature adjusted to the specific requirements of this material, Cercon ht combines proven clinical safety with outstanding translucent properties.

✓ Flexural strength

Cercon ht has the same flexural strength as Cercon base.

✓ Long-term stability

Artificial-aging studies (thermal cycling and storing in a water bath) have shown that the long-term stability of Cercon ht is the same as for Cercon base.

✓ Veneering characteristics

Cercon ht has the same excellent veneering characteristics as frameworks for metal-ceramic restorations, the gold standard.

✓ Clinical safety

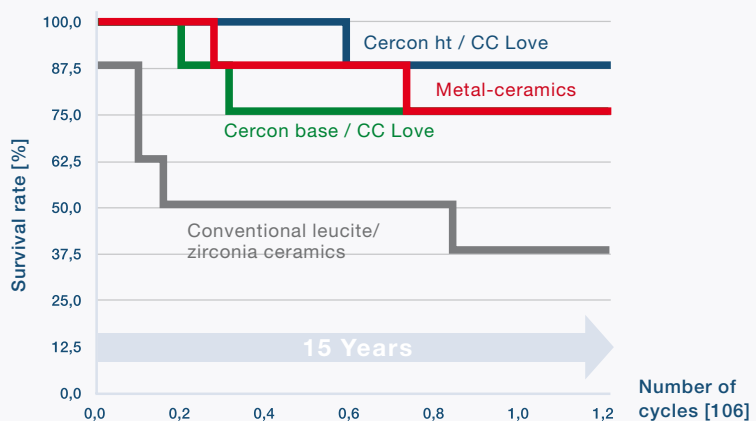
Cercon ht is the result of ongoing Cercon development efforts, offering comprehensive and validated safety.

Source: Cercon smart ceramics, Scientific Research vol. IV

Veneering characteristics comparable to PFM

Scientific studies have shown that the survival rates of Cercon base and Cercon ht with Cercon ceram love at a specific rate of long-term cooling are comparable to those of proven metal-ceramic systems.

Source: University of Heidelberg



Cercon ht: safety of full-contour restorations redefined

Fully anatomic crowns and bridges



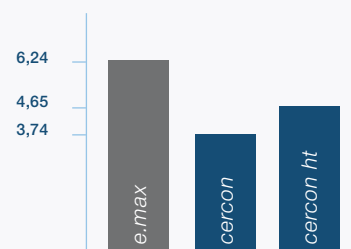
Cercon ht – the next zirconia generation with outstanding translucency and conservative preparation option for fully anatomic crowns and bridges (available from May 2011)

Safety of fully anatomic designs under standardized laboratory conditions

All previous studies on the wear behaviour of fully anatomic crowns and antagonists have been performed on a glaze + polish base and do not take into account any subsequent occlusal adjustments. Now, for the first time, a scientific study has examined adjusted and repolished Cercon ht crowns. Cercon ht crowns, designed to fully anatomic contour, are demonstrably safe for their antagonists.

Source: University of Regensburg

*Polished
Antagonist wear area [mm²]*



Most frequent complications of fixed all-ceramic restorations



Biological failure

due to an increased loss of tooth substance, given preparation recommendations of up to 2 mm.

Solution

- ✓ **Cercon ht** crowns require a wall thickness of only 0.5 mm, including a 0.1 mm reserve for occlusal adjustment.



Chipping

due to elevated force levels.

Solution

- ✓ **Cercon ht** crowns and bridges offer chipping protection thanks to their monolithic material.



Fractures

of restorations due to elevated force levels.

Solution

- ✓ **Cercon ht** crowns and bridges made of pure zirconia offer maximum flexural strength.



Decementation

Loss of cement retention in extensively prepared short abutments with a reduced supply of cementing surfaces.

Solution

- ✓ **Cercon ht** crowns and bridges facilitate conservative tooth preparation, increasing the surface available for cementing and improving retention.



Damaged antagonists

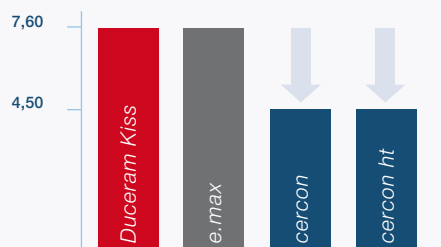
through increased wear and tear.

Solution

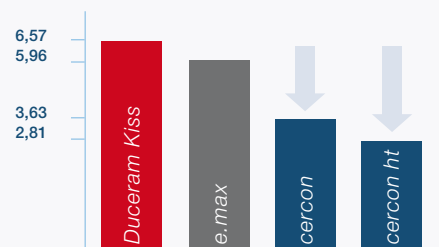
- ✓ **Cercon ht** crowns and bridges are made of the first zirconia material proven to be safe for antagonists after occlusal adjustment and repolishing.

Safety of fully anatomic designs under real-life conditions

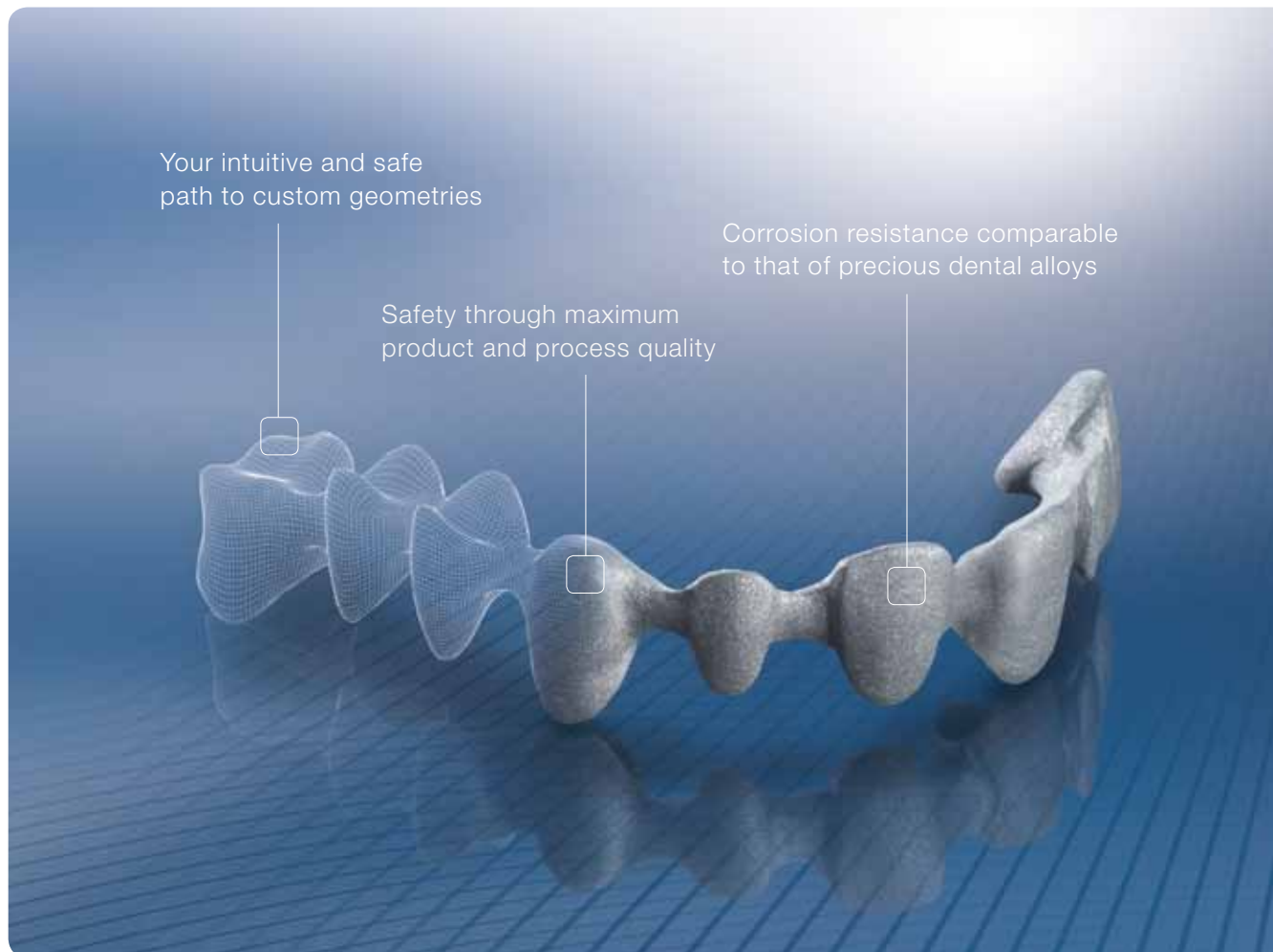
After occlusal adjustment
Antagonist wear area [mm²]



After repolishing
Antagonist wear area [mm²]



The attractive alternative
CoCr by Compartis



SLM bridge framework

From design to perfect fit

<p>Design: The design work is performed at the dental lab. Fully veneered as well as full and reduced anatomical designs are possible.</p>	<p>Production: Crown and bridge frameworks produced by Selective Laser Melting on a single construction build up plate.</p>	<p>Fit: The steps of the process are perfectly harmonized, resulting in an excellent fit.</p>

Your benefits

Flexibility

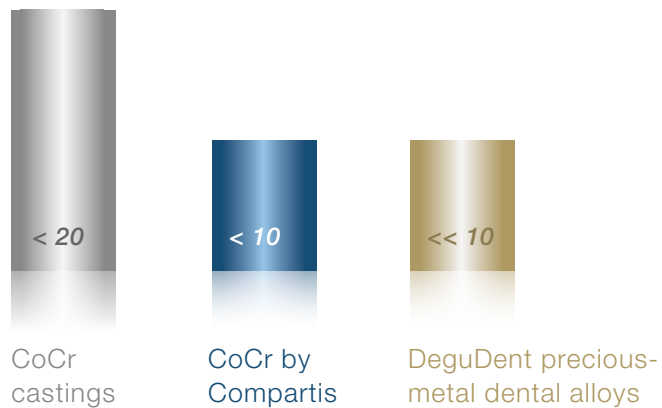
- ✓ Variable cost

Economy

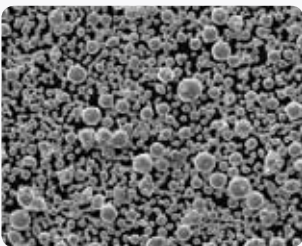
- ✓ Low capital investment – only one scanner necessary
- ✓ Special offers at attractive prices per item

System safety

- ✓ Harmonized processes
- ✓ Corrosion resistance comparable to that of precious dental alloys



Corrosion in $\mu\text{g}/\text{cm}^2$ (after 7 days/37°C)



Cobalt-chromium powder, structural close-up: *The cobalt-chromium powder specifically designed for the SLM technology combines with the finely tuned light-transmission strategy to yields excellent product properties.*



Homogeneity of SLM frameworks: *The process results in highly homogeneous crown and bridge frameworks with high strength, good polishing properties and high stability during ceramic firing.*

Implant-supported restorations

Custom Abutments



Individually designed one-piece and two-piece Abutments, ANKYLOS® /X, XIVE®, DENTSPLY Friadent, Germany

Custom zirconia or titanium abutments



One-piece Custom Abutments by Compartis (ZrO₂, Ti)



One-piece Custom Abutment by Compartis (ZrO₂) for XIVE®, ANKYLOS® C/,DENTSPLY Friadent, Germany



One-piece Custom Abutment by Compartis (Ti) for ANKYLOS®/X, DENTSPLY Friadent, Germany

Your benefits

Flexibility

- ✓ Complement to prefabricated abutments
- ✓ For one-piece and two-piece abutments
- ✓ For custom abutment designs
- ✓ Many different implant systems as DENTSPLY Friadent, AstraTech, Biomet 3i, Camlog, Nobel Biocare, Straumann, Zimmer

Economy

- ✓ Lower abutment inventories
- ✓ Single one-time licensing fee per implant manufacturer*
- ✓ No extra update fees*

* Cercon art offerings

System safety

- ✓ Approved after examining the indication examples
- ✓ Produced from clinically tested materials
- ✓ DENTSPLY Friadent ANKYLOS[®] C/X and XIVE[®] custom abutments with original implant connector interface geometry made from original materials



Two-piece Custom Abutment by Compartis/Cercon brain expert (ZrO₂ on Ti base), for selected implants by Astra Tech GmbH, Germany



Two-piece Custom Abutment by Compartis, Cercon brain expert (ZrO₂ on Ti base), for selected implants by CAMLOG AG, Swiss



Two-piece Custom Abutment by Compartis/Cercon brain expert (ZrO₂ on Ti base), for selected implants by Nobel Biocare AG, Swiss

Implant-supported restorations - superstructures
ISUS by Compartis



More and more leading dental laboratories and implant dentists rely on these custom-designed superstructures.

From stone model to screw-retained superstructure

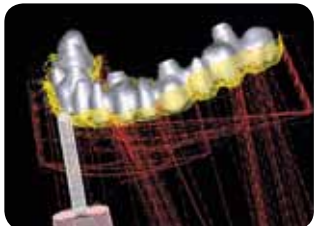
IMPLANT-SUPPORTED RESTORATIONS



Your model complete with analogues, gingival mask and setup/waxup



CAD design to your specifications; you are in full charge of inspecting and improving the 3D viewer



Individual milling strategy for each superstructure

Your benefits

Flexibility

- ✓ Screw-retained bar or bridge
- ✓ Compatible with approx. 250 implant systems
- ✓ Suitable for different implant systems in one jaw
- ✓ Available on abutment or implant level
- ✓ Combinable with a large number of attachments
- ✓ Different models for composite or ceramic veneering or for prefabricated denture teeth

Economy

- ✓ Available in titanium or cobalt-chromium
- ✓ CAD design – no manual modelling required

System safety

- ✓ Milled from a homogeneous high-strength blank
- ✓ Stress-free passive fit
- ✓ Elimination of risks associated with casting and casting-to, soldering and lasering
- ✓ Single-material principle (titanium superstructure, titanium implant) can be implemented



Screw-retained bridge for ceramic or composite veneering



Screw-retained bar with retentive elements



Final restoration with with confection oder artificial denture teeth

Fascination Prosthetics

28227/1103/Z
Last revision: 03/2011

