Cercon® xt ML
Extra translucent multilayer zirconia

Layers ahead of the rest
Brochure for the dental laboratory
Cercon® xt ML – Extra translucent Multilayer zirconia

Layers ahead of the rest

Take monolithic restorations to the next level

As the original pioneer of zirconia, we spent more time than anyone else on development to create the different layers in our multilayer product to present an ideal gradient for perfect aesthetics in the final restoration.

With Cercon xt ML there is no need for color staining.

It provides a natural blend from incisal to cervical and translucency to mimic nature while not compromising strength and integrity. Sintering is no different to Cercon xt or Cercon ht.

Thomas Bartsch
TRIODONT Zahntechnik GmbH
Eschweiler | Germany
Cercon® xt ML – The new zirconia standard for lifelike aesthetics, color accuracy, and faster production

Perfect Lifelike Gradient
Matching natural tooth aesthetics without the need to veneer or stain, especially for the anterior region (flexural strength: 750 MPa)

Guaranteed Color Accuracy*
Unparalleled color matching covering all 16 VITA** shades and BL2

Easy To Use
Easy to nest and same milling and firing protocols for all Cercon zirconia discs

*Using our trusted True Color Technology
** VITA is a trademark of VITA Zahnfabrik
Layering in the disc

Perfect Lifelike Gradient

The four shade layers create a seamless gradient from incisal to dentin just like a natural tooth.

The Benefits

- Premium aesthetics even with monolithic restorations
- After sintering, the different shade layers yield a highly convincing shade gradient, from the incisal to the dentin — just as in natural teeth
- Extra high translucency (approx. 49 %) and unparalleled shade accuracy allows life-like aesthetics especially for the anterior region
- All 16-VITA shades and BL2 are available. Every shade has its own incisal shade.
- An alternative to lithium disilicate (translucency)

The special light-conducting behavior of zirconia required the shade concept to be completely re-thought. The result: Cercon xt ML.

- The clever arrangement of the layers with differentiated compatible incisal shades (VITA shades) prevents excessive brightness
- The asymmetrical dentin/incisal layering for all disc thicknesses yields a natural distribution of value (brightness)
LAYER ARRANGEMENT

The layering in the incisal area is the same for all three disc sizes; only the dentin area has a different thickness. This makes nesting particularly easy for the dental technician.

<table>
<thead>
<tr>
<th>Disc height</th>
<th>Incisal</th>
<th>14 mm</th>
<th>100 %</th>
<th>18 mm</th>
<th>100 %</th>
<th>25 mm</th>
<th>100 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incisal</td>
<td>3.6 mm</td>
<td>25.70</td>
<td>3.6 mm</td>
<td>20 %</td>
<td>3.6 mm</td>
<td>14.40 %</td>
<td></td>
</tr>
<tr>
<td>Transition layer #2</td>
<td>1.8 mm</td>
<td>12.85</td>
<td>1.8 mm</td>
<td>10 %</td>
<td>1.8 mm</td>
<td>7.20 %</td>
<td></td>
</tr>
<tr>
<td>Transition layer #1</td>
<td>1.8 mm</td>
<td>12.85</td>
<td>1.8 mm</td>
<td>10 %</td>
<td>1.8 mm</td>
<td>7.20 %</td>
<td></td>
</tr>
<tr>
<td>Dentin</td>
<td>6.8 mm</td>
<td>48.60</td>
<td>10.8 mm</td>
<td>60 %</td>
<td>17.8 mm</td>
<td>71.20 %</td>
<td></td>
</tr>
</tbody>
</table>

Feedback from test users

The secret is an optimized color gradient built into an already proven material.

Finishing requires glaze only - natural gradient removes the need to layer or stain.

Hard to tell the difference between a Cercon xt ML monolithic and a veneered restoration.

Before milling and sintering
Placement of the crown in CAM software in an 18-mm Cercon xt ML disc.

After sintering
Shade gradient in the resulting crown (sintering shrinkage included).
True Color Technology

Guaranteed Color Accuracy

Unparalleled color matching covering all 16 VITA shades using our trusted True Color Technology allows lifelike aesthetics

Benefits

+ Decades of expertise in ceramic shades
+ Proprietary mixing and shade formulas
+ Consistent quality between batches (A3 will always be A3)
+ Shade accuracy confirmed by customers in Europe and the USA

Shade matching is easier and just glaze and go

Unparalleled shade matching across all 16 classic VITA shades
**Cercon® xt ML**

**Technical specifications**

| Composition (in % by mass) Cercon® xt ML | • Zirconium oxide  
 • Yttrium oxide 9%  
 • Hafnium oxide < 3%  
 • Aluminum oxide, Silicon oxide, other oxides < 2% |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexural strength</td>
<td>750 MPa</td>
</tr>
<tr>
<td>Translucency*</td>
<td>49%</td>
</tr>
<tr>
<td>CTE (coefficient of thermal expansion)</td>
<td>10.1 µm/m·K (25–500 °C)</td>
</tr>
</tbody>
</table>
| Indications | Indications in the anterior and posterior segments:  
Cercon® xt ML:  
Indicated for all-ceramic restorations in the anterior and posterior segments for:  
• Crowns  
• Three-unit bridges (up to the 2nd premolar) |
| Sintering temperature | 1500 °C |
| Same firing program as for all Cercon zirconia products. Speed sintering in 2 hours and 50 minutes |
| Adapter ring | green |
| True Color Technology | yes |
| Shades | All 16 VITA** shades + BL2 |

* Translucency measured on a white disc with a haze meter  
** VITA is a trademark of VITA Zahnfabrik GmbH
Simple, efficient, and fast

Easy to use

Easy to nest and same milling and firing protocols for all Cercon zirconia discs

The Benefits

+ The layering in the incisal area is the same for all three disc sizes; only the dentin area has a different thickness. This makes nesting particularly easy for the dental technician.

+ Improves productivity with reproducible results and time savings (milling, sintering, glaze)

+ Identical sintering programs/temperatures for all Cercon zirconia products

+ Speed sintering in less than 3 hours for all Cercon zirconia products

+ QR code scanning for easy use in the inLab MC X5 (CAM software version 19 and later)

+ Key way on disc surface for exact positioning when using the same discs for multiple millings

EVIDENCE OF CLINICAL PERFORMANCE

International Publications

More than 25

Clinical Studies

More than 45

confirm that Cercon zirconium oxide is among the best documented and evaluated zirconia ceramic materials worldwide.

on the clinical performance of zirconia crowns and fixed partial dentures have been published.
The Benefits for the patient

+ Long-lasting
+ Biocompatible
+ Aesthetic (True Color Technology)
+ Tested safety (Cercon is the best-tested all-ceramic system in the world)

Visualization of different layers in inLab CAM 19
(available in May 2019)

Feedback from test users

This results in amazing aesthetics and great mill-ability

Thickness and positioning of dentin layer makes it easier to nest and ensures the perfect gradient every time

Easy to switch – no new milling or firing protocols

Perfect for monolithic or cut-back restorations

Nesting of a molar, a 3-unit bridge and an anterior tooth in a 18 mm Cercon xt ML disc
Dentsply Sirona’s new Cercon xt ML is the new benchmark against which all other multilayers will be measured against. This great new product picks up where the industry left off.

As the name suggests, it is a multilayer, but it is a multilayer with some innate differences. Some industry materials have layered products, usually three to four layers. Many of these are layered in equal distribution—each layer being very identifiable from the proceeding. However, the new Cercon xt ML is smart by design—featuring the body color being 60% of the height, and then two beautifully blending transition layers, and then capped off with a unique incisal for each 16 classic shades.

Having been able to evaluate this material in the laboratory, I remember remarking “this just looks like a tooth”. One would think that such statements would be customary in a lab, but I can assure you that it is not. This product, coupled with modern design and milling capability is allowing dental technicians to finish better looking restorations, faster.

Evolution is based upon purposeful improvement. The Cercon xt ML is now the industry’s finest multilayer. It is my belief that you will be as equally delighted with this material as I am. Happy milling.

Dentsply Sirona’s new Cercon xt ML is the new benchmark against which all other multilayers will be measured against. This great new product picks up where the industry left off.

As the name suggests, it is a multilayer, but it is a multilayer with some innate differences. Some industry materials have layered products, usually three to four layers. Many of these are layered in equal distribution—each layer being very identifiable from the proceeding. However, the new Cercon xt ML is smart by design—featuring the body color being 60% of the height, and then two beautifully blending transition layers, and then capped off with a unique incisal for each 16 classic shades.

Having been able to evaluate this material in the laboratory, I remember remarking “this just looks like a tooth”. One would think that such statements would be customary in a lab, but I can assure you that it is not. This product, coupled with modern design and milling capability is allowing dental technicians to finish better looking restorations, faster.

Evolution is based upon purposeful improvement. The Cercon xt ML is now the industry’s finest multilayer. It is my belief that you will be as equally delighted with this material as I am. Happy milling.
Cercon xt ML provides a natural blend from incisal to cervial. It provides translucency to mimic nature and does not compromise strength and integrity of the material. Sintering of Cercon xt ML is no different than sintering Cercon ht and Cercon xt. For 3-unit bridges you can sinter in fast speed. Cercon xt ML helps lab technicians provide beautiful and strong restorations to dentists and patients.

"Edwin Kee, MCDT, TE
Associate Professor
LSU School of Dentistry
New Orleans | Louisiana | USA

For Van Beers Dental Techniques Cercon xt ML is the solution for minimal invasive monolithic restorations. It’s smooth color and transparency gradient, same fast Cercon sintering cycle, makes this multi layer zirconium the best in class. Cercon xt ML does the job for us.

"Casper van Beers
Dental Technician
Van Beers Dental Techniques
Amsterdam | Netherlands

Cercon xt ML represents a great alternative in prosthetic restorations of anterior teeth. The accurate mix of cervical chroma that decreases toward incisal increasing traslucency, while maintaining the correct value as in the natural tooth.

"Paolo Mola
Odontomaster
Rivoli | Italy

I am super excited to add this to my arsenal of Cercon zirconias! Cercon xt ML is a beautiful zirconia. It is true to shade and the gradient within the disc is outstanding. Being able to use the same sintering cycle as Cercon ht and Cercon xt is also a great feature.

"Derrick Staggs
Staggs Dental Lab, LLC
McCoole | Maryland | USA

Cercon xt ML helps lab technicians provide beautiful and strong restorations to dentists and patients.

"Derrick Staggs
Staggs Dental Lab, LLC
McCoole | Maryland | USA

Cercon®
Compatible with all leading open CAD/CAM systems

inLab MC X5
(CAM software version 19 and later):
QR code scanning for ease of handling
<table>
<thead>
<tr>
<th>Product</th>
<th>REF</th>
<th>Product</th>
<th>REF</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>5366115014</td>
<td>C1</td>
<td>5366115914</td>
</tr>
<tr>
<td>A1 14</td>
<td></td>
<td>C1 14</td>
<td></td>
</tr>
<tr>
<td>A1 18</td>
<td></td>
<td>C1 18</td>
<td></td>
</tr>
<tr>
<td>A1 25</td>
<td></td>
<td>C1 25</td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>5366115114</td>
<td>C2</td>
<td>5366116014</td>
</tr>
<tr>
<td>A2 14</td>
<td></td>
<td>C2 14</td>
<td></td>
</tr>
<tr>
<td>A2 18</td>
<td></td>
<td>C2 18</td>
<td></td>
</tr>
<tr>
<td>A2 25</td>
<td></td>
<td>C2 25</td>
<td></td>
</tr>
<tr>
<td>A3</td>
<td>5366115214</td>
<td>C3</td>
<td>5366116114</td>
</tr>
<tr>
<td>A3 14</td>
<td></td>
<td>C3 14</td>
<td></td>
</tr>
<tr>
<td>A3 18</td>
<td></td>
<td>C3 18</td>
<td></td>
</tr>
<tr>
<td>A1 25</td>
<td></td>
<td>C3 25</td>
<td></td>
</tr>
<tr>
<td>A3.5</td>
<td>5366115314</td>
<td>C4</td>
<td>5366116214</td>
</tr>
<tr>
<td>A3.5 14</td>
<td></td>
<td>C4 14</td>
<td></td>
</tr>
<tr>
<td>A3.5 18</td>
<td></td>
<td>C4 18</td>
<td></td>
</tr>
<tr>
<td>A3.5 25</td>
<td></td>
<td>C4 25</td>
<td></td>
</tr>
<tr>
<td>A4</td>
<td>5366115414</td>
<td>D2</td>
<td>5366116314</td>
</tr>
<tr>
<td>A4 14</td>
<td></td>
<td>D2 14</td>
<td></td>
</tr>
<tr>
<td>A4 18</td>
<td></td>
<td>D2 18</td>
<td></td>
</tr>
<tr>
<td>A4 25</td>
<td></td>
<td>D2 25</td>
<td></td>
</tr>
<tr>
<td>B1</td>
<td>5366115514</td>
<td>D3</td>
<td>5366116414</td>
</tr>
<tr>
<td>B1 14</td>
<td></td>
<td>D3 14</td>
<td></td>
</tr>
<tr>
<td>B1 18</td>
<td></td>
<td>D3 18</td>
<td></td>
</tr>
<tr>
<td>B1 25</td>
<td></td>
<td>D3 25</td>
<td></td>
</tr>
<tr>
<td>B2</td>
<td>5366115614</td>
<td>D4</td>
<td>5366116514</td>
</tr>
<tr>
<td>B2 14</td>
<td></td>
<td>D4 14</td>
<td></td>
</tr>
<tr>
<td>B2 18</td>
<td></td>
<td>D4 18</td>
<td></td>
</tr>
<tr>
<td>B2 25</td>
<td></td>
<td>D4 25</td>
<td></td>
</tr>
<tr>
<td>B3</td>
<td>5366115714</td>
<td>BL2</td>
<td>5366116714</td>
</tr>
<tr>
<td>B3 14</td>
<td></td>
<td>BL2 14</td>
<td></td>
</tr>
<tr>
<td>B3 18</td>
<td></td>
<td>BL2 18</td>
<td></td>
</tr>
<tr>
<td>B3 25</td>
<td></td>
<td>BL2 25</td>
<td></td>
</tr>
<tr>
<td>B4</td>
<td>5366115814</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B4 14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B4 18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B4 25</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DeguDent GmbH
Rodenbacher Chaussee 4
63457 Hanau-Wolfgang
Germany
+49 6181 59-50
dentsplysirona.com

Dentsply Sirona
570 West College Avenue,
York, PA 17401
800-243-1942
dentsplysirona.com