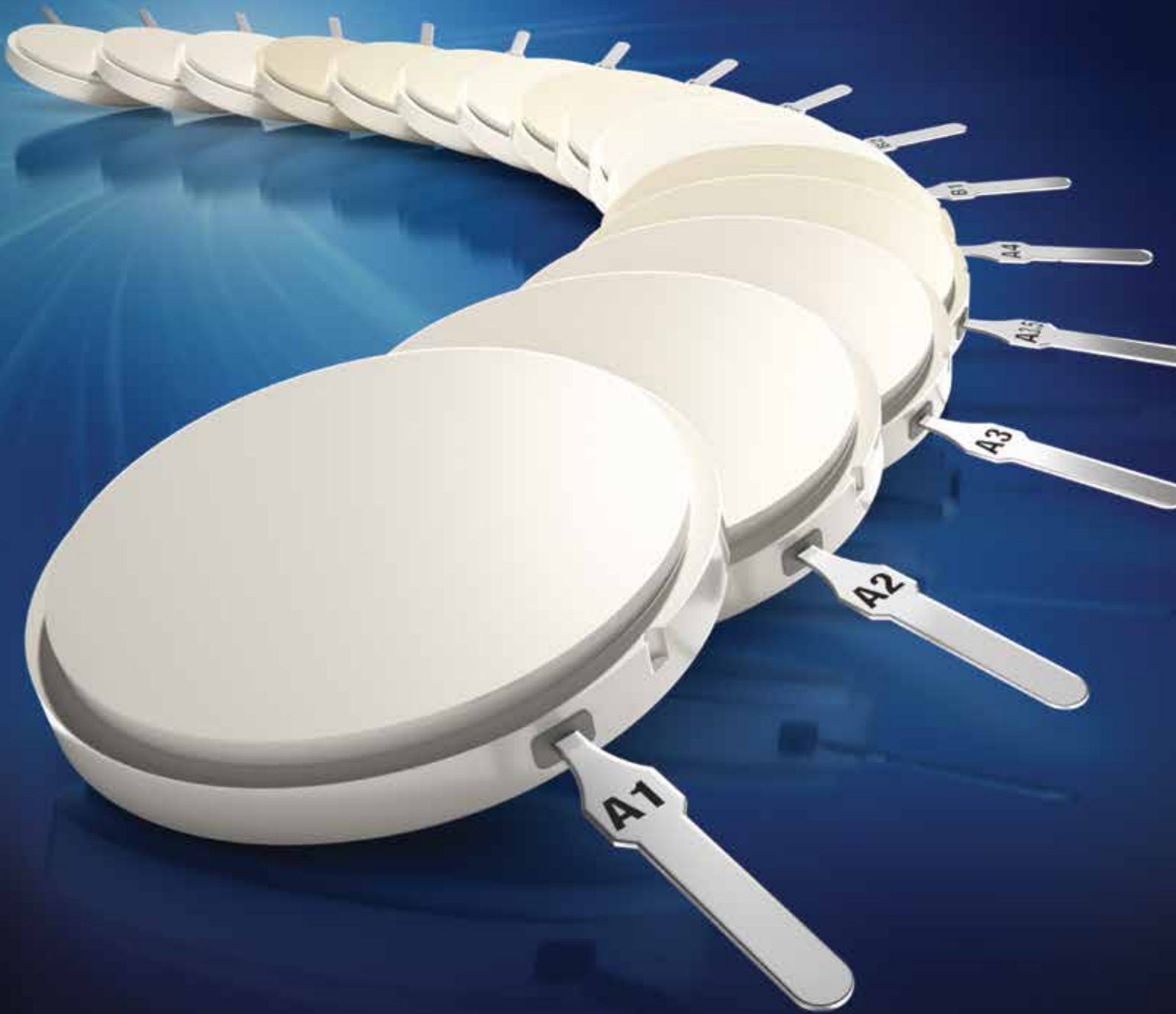


True Color Technology:
The new zirconia standard
for shade accuracy



DENTSPLY

cercon[®] ht
Shaded Zirconia

True Color Technology

With True Color Technology, Cercon ht defines a new benchmark for Shade Accuracy!

Shade accuracy and shade consistency are the central elements of ceramic restoration – and crucial for success.

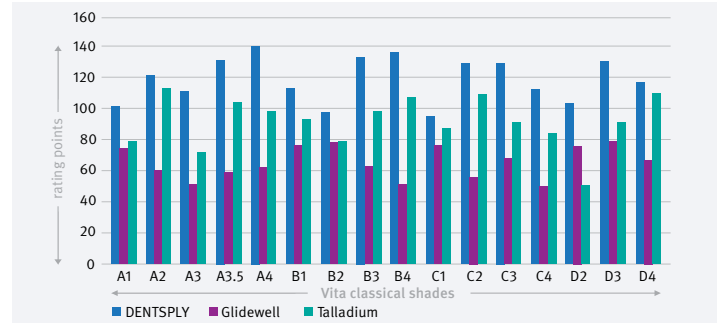
Cercon ht is now available in the 16 Vita®* Classical Shades precisely matched to the Vita shade standard.

- Drawing upon DENTSPLY's expertise in monolithic and veneered ceramic materials and restorations, Cercon ht Shaded Zirconia formulations are optimized for maximum shade accuracy.
- The combination of DENTSPLY's ceramic shading expertise and Cercon's demonstrated product quality consistency, delivers this new benchmark in shade accurate zirconia technology.
- True Color Technology increases lab productivity due to less time needed to stain zirconia restorations and reduced remakes due to better shade accuracy the first time.

Customer Evaluations

US and German Customers prefer the new Cercon ht Shaded Zirconia for shade accuracy versus the Vita Shade standard in a blind test against popular competitive product brands.

The new Cercon ht Shaded Zirconia consistently delivers shade accuracy across the full range of the Classic Vita shades.



Evaluation of the color accuracy of Cercon ht based on the 16 Vita shades by participants from Europe and the USA in blind testing.

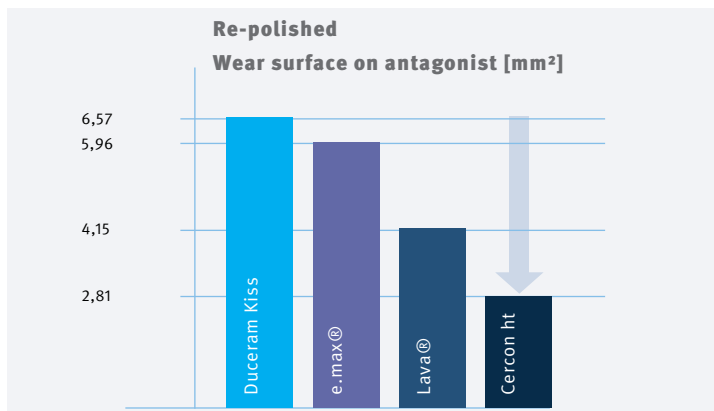
Translucency and wear performance

The improved translucency properties of Cercon ht make it an ideal choice for full contour restorations.



Light transmission by conventional zirconia and Cercon ht

The University of Regensburg performed intensive wear and tear studies on a variety of ceramic materials suitable for monolithic restorations.



Wear performance of fully contoured restorations/University of Regensburg, 2011

Customer feedback

“ I did not realize there were such strong fluctuations in the accuracy of the Vita® shades in the market. Especially not when comparing reputable manufacturers. ”

“ The variation in the accuracy of the shades was unbelievable. ”

“ The reproducibility of the 16 Vita shades in the stains concept convinced me. ”

* Vita® is a registered trademark of Vita Zahnfabrik H. Rauter GmbH & Co.

Zirconia for open systems



Qualified CAD/CAM systems

After extensive testing, the pre-sintered strength of Cercon ht is specified for optimal performance across a range of milling machines. Cercon ht delivers excellent edge stability, marginal fit and detailed representation.

The versatility of Cercon ht performance in leading open CAD CAM Systems has been qualified.

New disk ring

The new universal disk ring has been specifically developed for Cercon ht 98-mm disks to ensure secure fit.

The uniform adhesive attachment of the disk ring across the entire contact surface provides maximum precision and durability throughout the milling process.

Patent pending.



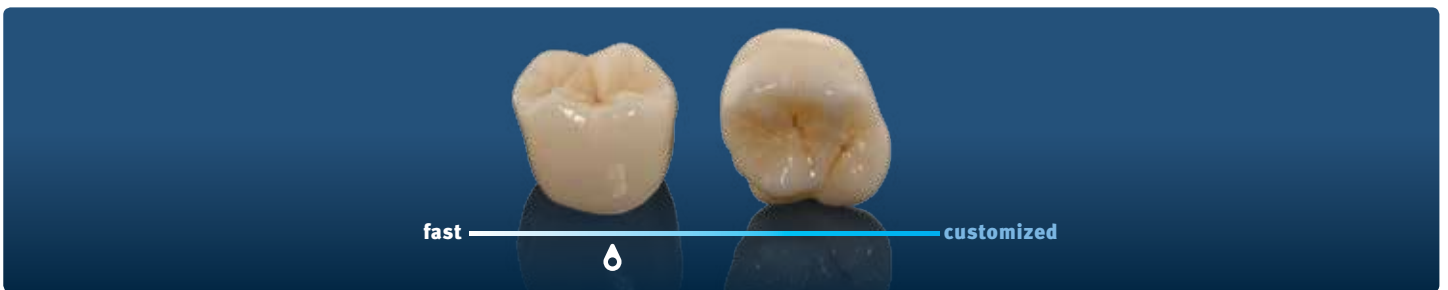
5 Performance levels

With the new Cercon ht Shaded Zirconia, the technician can choose the desired technique to deliver the finished crown customized for each specific case requirements.

1 Glazed only



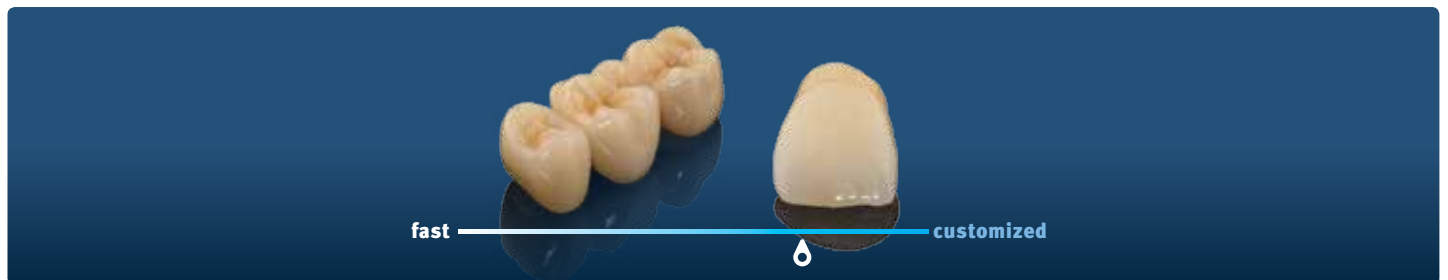
2 Stained and glazed



3 Cut-back technique



4 Veneered technique



5 Unlimited customization



Product properties

Cercon ht blanks are made of yttria stabilized zirconia (Y-TZP). They are used in fabricating frameworks for fixed prosthetic restorations. The material is an oxide ceramic material characterized by its particularly high strength. Depending on the framework design, Cercon ht frameworks can be veneered or delivered as monolithic full contoured restorations. The technician selects the blank from a range of pre shaded disks to deliver the desired tooth shade and the space available for the veneer. With fully contour restorations, no space is required for the ceramic veneer, which may allow the dentist to preserve more natural dentition during preparation.

Framework material	Zirconia (Y-TZP)
Temporary cementation	Possible (for fully contoured restorations)
Definitive cementation	<ul style="list-style-type: none"> • Adhesive cementing • Conventional cementation

Objects are individually fabricated to your digital design specifications such as anatomic contour, framework and wall thickness, connector diameter and cementing gap.



Technical specifications:

- Type II, class 6 (pursuant to DIN EN ISO 6872:2008)
- CTE; 10.5 $\mu\text{m}/\text{m} \cdot \text{K}$ (25–500 °C)
- Modulus of elasticity: 210 GPa
- Flexural strength: approx. 1,200 MPa (three-point flexural testing)
- Shrinkage factor: 1.240

Composition (in % by mass):

- Zirconium oxide
- Yttrium oxide 5 %
- Hafnium oxide < 3 %
- Aluminium oxide
- Silicon oxide < 1 %

Indications for Use:

Cercon® ht is indicated in the anterior and posterior segments for:

- Crowns
- Telescopic primary crowns
- Multi-unit bridges (with no more than two pontics between abutment crowns)

Cercon® ht can be used as a substructure (framework) which is then veneered with a dental veneering ceramic or can be used for full-contour application (without veneering) as well. In the case of telescopic primary crowns, the substructure is not veneered.



Photography courtesy of:
Dr. Sven Rinke, M.Sc.,
Geleitstr. 68, 63456 Hanau, Germany
Reference the Cercon Clinical Manual
#28009/1502/Z

Cercon ht Zirconia Options

1. 16 Vita®** pre-shaded disks
2. White disk stained to desired Vita shade
3. 6 Vita pre-shaded disks stained to the desired Vita shade using the concept below



6 out of 16 and the Celtra stains

Crown staining concept utilizes 6 Cercon ht Shaded Zirconia Disks to achieve all 16 Vita Shades. This technique enables maximum versatility with minimal pre-shaded disk inventory.

	A	B	C	D
1	●	●	●	—
2	↓	↓		●
3	●	●	↓	↓
3.5	↓			
4	↓	↓	↓	↓

Vita Shade	Disk Color	Body 1 Stain, Glaze Firing	Body 2 Stain, Glaze Firing	Enamel Stain
A1	A1	Body stain 3, olive**		Enamel i1 + Enamel i2
A2	A1	Body stain 2+3, olive**		Enamel i1 + Enamel i2
A3	A3	Body stain 1+3		Enamel i1 + Enamel i2
A3.5	A3	olive	Body stain 3	Enamel i1 + Enamel i2
A4	A3	Body stain 1+3	Body stain 3	Enamel i1 + Enamel i2
B1	B1	Body stain 3		Enamel i1 + Enamel i2
B2	B1	Body stain 3+4		Enamel i1
B3	B3	Body stain 2+3		Enamel i1 + Enamel i2
B4	B3	Body stain 3+4, olive + sunset**		Enamel i1 + Enamel i2
C1	C1	Body stain 3		Enamel i1 + Enamel i2
C2	C1	Body stain 3		Enamel i1 + Enamel i2
C3	C1	Body stain 3		Enamel i1 + Enamel i2
C4	C1	Body stain 3, olive**		Enamel i1 + Enamel i2
D2	D2	Body stain 4		Enamel i1 + Enamel i2
D3	D2	Body stain 4		Enamel i1 + Enamel i2
D4	D2	Body stain 3, olive**	Body stain 3, sunset**	Enamel i1 + Enamel i2

* Vita® is a registered trademark of Vita Zahnfabrik H. Rauter GmbH & Co.

** In an amount necessary to effect the desired change.

Ordering information

Shaded Cercon ht disk 98mm

Shade	Product	Reorder #
A1	Cercon ht A1 disk 12mm	5366091012
	Cercon ht A1 disk 14mm	5366091014
	Cercon ht A1 disk 18mm	5366091018
	Cercon ht A1 disk 25mm	5366091025
A2	Cercon ht A2 disk 12mm	5366091112
	Cercon ht A2 disk 14mm	5366091114
	Cercon ht A2 disk 18mm	5366091118
	Cercon ht A2 disk 25mm	5366091125
A3	Cercon ht A3 disk 12mm	5366091212
	Cercon ht A3 disk 14mm	5366091214
	Cercon ht A3 disk 18mm	5366091218
	Cercon ht A3 disk 25mm	5366091225
A3.5	Cercon ht A3.5 disk 12mm	5366091312
	Cercon ht A3.5 disk 14mm	5366091314
	Cercon ht A3.5 disk 18mm	5366091318
	Cercon ht A3.5 disk 25mm	5366091325
A4	Cercon ht A4 disk 12mm	5366091412
	Cercon ht A4 disk 14mm	5366091414
	Cercon ht A4 disk 18mm	5366091418
	Cercon ht A4 disk 25mm	5366091425
B1	Cercon ht B1 disk 12mm	5366091512
	Cercon ht B1 disk 14mm	5366091514
	Cercon ht B1 disk 18mm	5366091518
	Cercon ht B1 disk 25mm	5366091525
B2	Cercon ht B2 disk 12mm	5366091612
	Cercon ht B2 disk 14mm	5366091614
	Cercon ht B2 disk 18mm	5366091618
	Cercon ht B2 disk 25mm	5366091625
B3	Cercon ht B3 disk 12mm	5366091712
	Cercon ht B3 disk 14mm	5366091714
	Cercon ht B3 disk 18mm	5366091718
	Cercon ht B3 disk 25mm	5366091725
B4	Cercon ht B4 disk 12mm	5366091812
	Cercon ht B4 disk 14mm	5366091814
	Cercon ht B4 disk 18mm	5366091818
	Cercon ht B4 disk 25mm	5366091825
C1	Cercon ht C1 disk 12mm	5366091912
	Cercon ht C1 disk 14mm	5366091914
	Cercon ht C1 disk 18mm	5366091918
	Cercon ht C1 disk 25mm	5366091925
C2	Cercon ht C2 disk 12mm	5366092012
	Cercon ht C2 disk 14mm	5366092014
	Cercon ht C2 disk 18mm	5366092018
	Cercon ht C2 disk 25mm	5366092025

Shade	Product	Reorder #
C3	Cercon ht C3 disk 12mm	5366092112
	Cercon ht C3 disk 14mm	5366092114
	Cercon ht C3 disk 18mm	5366092118
	Cercon ht C3 disk 25mm	5366092125
C4	Cercon ht C4 disk 12mm	5366092212
	Cercon ht C4 disk 14mm	5366092214
	Cercon ht C4 disk 18mm	5366092218
	Cercon ht C4 disk 25mm	5366092225
D2	Cercon ht D2 disk 12mm	5366092312
	Cercon ht D2 disk 14mm	5366092314
	Cercon ht D2 disk 18mm	5366092318
	Cercon ht D2 disk 25mm	5366092325
D3	Cercon ht D3 disk 12mm	5366092412
	Cercon ht D3 disk 14mm	5366092414
	Cercon ht D3 disk 18mm	5366092418
	Cercon ht D3 disk 25mm	5366092425
D4	Cercon ht D4 disk 12mm	5366092512
	Cercon ht D4 disk 14mm	5366092514
	Cercon ht D4 disk 18mm	5366092518
	Cercon ht D4 disk 25mm	5366092525

White Cercon ht disk 98mm

Size	Product	Reorder #
12mm	Cercon ht disk	5366092612
14mm	Cercon ht disk	5366092614
18mm	Cercon ht disk	5366092618
25mm	Cercon ht disk	5366092625

CELTRA Stains

CELTRA Universal Stains		Reorder #
Stain 0	5g	601500
Stain 1	5g	601501
Stain 2	5g	601502
Stain 3	5g	601503
Stain 4	5g	601504
Stain i1	5g	601511
Stain i2	5g	601512
Stain white	5g	601520
Stain cream	5g	601521
Stain sunset	5g	601522
Stain copper	5g	601523
Stain khaki	5g	601524
Stain olive	5g	601525
Stain mahogany	5g	601526
Stain violet	5g	601505

CELTRA Universal Glaze		Reorder #
Glaze	5g	601322

CELTRA Universal Liquids		Reorder #
Stain & Glaze liquid	15ml	601315
Stain & Glaze liquid	50ml	601350

CELTRA Stain & Glaze Kit		Reorder #
Kit		601601

Contains:
 8 – 0.18 oz (5 g) CELTRA Universal Stain:
 1, 2, 3, 4, i1, i2, olive, sunset
 1 – 0.18 oz (5 g) CELTRA Universal Overglaze
 1 – 4 Pack Flexible Firing Tray and Liner
 1 – 0.5 fl oz (15 ml) CELTRA Universal
 Stain and Glaze Liquid
 1 – Magic Stain Brush
 1 – 6 piece CELTRA Firing Pin Set



DENTSPLY International, Inc. is a multinational healthcare corporation with operations around the globe and a rich history of excellence. For over a century, DENTSPLY has been committed to providing the dental community with innovative, high-quality, cost-effective dental products For Better Dentistry. From humble beginnings in 1899, the Company has grown to become one of the largest professional dental product manufacturers in the world.