



Product catalog
CAD / CAM
Materials

CLOSE TO **YOU**

High Performance Ceramics

01

The raw materials

For us, it is a matter of course that only materials with the best properties come into consideration for dental products. The biocompatibility is the ultimate priority, in the selection of raw materials. Moreover only a high-purity, nanoscale ZrO₂ is suitable for medical use. To ensure reproducible batch stability, the raw material must indicate an extremely homogenous grain size distribution.

Chemical composition [wt.%]

	HS	HT	HT+	SHT
	DDBioZ 3Y-TZP-A	DDBioZX² 3Y-TZP-LA	DDcubeONE[®] 4Y-TZP	DDcubeX²[®] 5Y-TZP
ZrO ₂ + HfO ₂ + Y ₂ O ₃	≥ 99,0	≥ 99,0	≥ 99,0	≥ 99,0
Y ₂ O ₃	< 6	< 6	< 8	< 10
Al ₂ O ₃	< 0,5	≤ 0,15	< 0,15	≤ 0,01
Other oxides	< 1	< 1	< 1	< 1



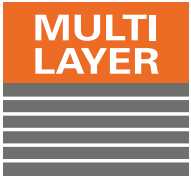







	HS	HT	HT+	SHT
	DDBioZcolor 3Y-TZP-A	DDBioZX²color 3Y-TZP-LA	DDcubeONE[®]ML 4Y-TZP	DDcubeX²[®]ML 5Y-TZP
Color method Industrial precolored blanks	Multi Additive Technology [®]	Multi Additive Technology [®]	Multi Additive Technology [®]	Multi Additive Technology [®]
Additive	Fe ₂ O ₃ Er ₂ O ₃ MnO ₂	Fe ₂ O ₃ Er ₂ O ₃ MnO ₂	Fe ₂ O ₃ Er ₂ O ₃ Co ₃ O ₄	Fe ₂ O ₃ Er ₂ O ₃ MnO ₂
Colors	in 8 VITA [®] shades + 5 Universal shades	in 16 VITA [®] shades + 5 Universal shades	in 16 VITA [®] shades + 1 Bleach shade	in 16 VITA [®] shades + 1 Bleach shade

Multi Additive Technology[®] – more than just color

We achieve brilliant color effects by adding selected ions of rare soils or transition metals into the zirconium matrix. Our balanced ion formulation and the homogeneous distribution in the zirconia structure is what we call Multi Additive Technology[®]. It is the key to excellent mechanical and optical characteristics.

By means of our Multi Additive Technology colored blanks show anatural chroma based on the definition in the VITA classical[®] color scale, while maintaining the natural translucency of the zirconia material.



	 <p>SHT Super High Translucent</p>	 <p>HT+ High Translucent Plus</p>
	<p>DDcubeX²ML</p>  <p>16 VITA®- + 1 Bleach shade</p>	<p>DDcubeONE^{ML}</p>  <p>16 VITA®- + 1 Bleach shade</p>
		
	<p>DDcubeX²</p> 	<p>DDcubeONE</p> 
<p>Dentine Liquids</p> 	<p>DDProShade^C DDBasicShade</p>	<p>DDProShade^Z DDBasicShade</p>

HT

High Translucent

HS

High Strength

DDBioZX²color



16 VITA®-
+ 5 Universal
shades

DDBioZcolor



8 VITA®-
+ 5 Universal
shades

DDBioZX²



DDBioZ



DDProShadeZ

DDBasicShade

DDProShadeZ

DDBasicShade

Indication and type guide



Super High Translucent



High Translucent Plus

DDcubeX²

5Y-TZP

DDcubeONE

4Y-TZP



Translucency %
(1 mm thick)

49%

45%

Strength MPa

750 MPa (white) – 800 MPa (ML)

> 1.250 MPa (white and ML)

Type and Indication
(ISO 6872)

type II, class 4



≤ 3 units

type II, class 5



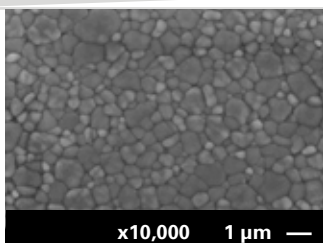
≥ 4 units

Cubic phase %

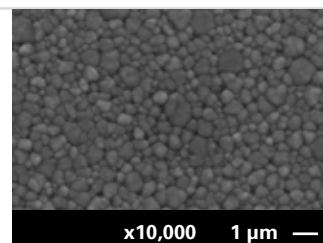
~ 50%

~ 30%

SEM picture of crystal structure



x10,000 1 μm —



x10,000 1 μm —

Sources:

Accredited test laboratory. Bending strength measured in accordance with DIN EN ISO 6872 in the 3- point or *4-point approach. 4-point bending strength values are generally lower than 3- point values.

R&D Dental Direkt. Translucency measured by means of a spectrophotometer on 1 mm thick, polished samples.

HT

High Translucent

HS

High Strength

DDBioZX²

3Y-TZP-LA

DDBioZ

3Y-TZP-A



40%

35%

1.100 MPa* (white) – 1.250 MPa (color)

1.300 MPa* (white) – 1.450 MPa (color)

type II, class 5



≥ 4 units

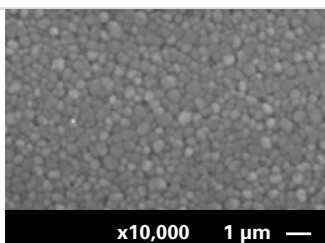
type II, class 5



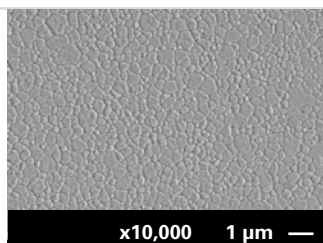
≥ 4 units

~ 0%

0%



x10,000 1 μm —



x10,000 1 μm —

Indication and aesthetic guide

Dental Direkt		veneers	INLAYS/ ONLAYS	reduced CROWN	full contour CROWN anterior tooth	full contour CROWN posterior tooth	Hybrid ABUTMENT CROWN
SHT	<i>DDcubeX²</i> <i>DDcubeX²ML</i>						
HT+	<i>DDcubeONE</i> [®] <i>DDcubeONE</i> [®] ML						
HT	<i>DDBioZX²</i> <i>DDBioZX²color</i>						
HS	<i>DDBioZ</i> <i>DDBioZcolor</i>						

Ideal results depend on individual circumstances.

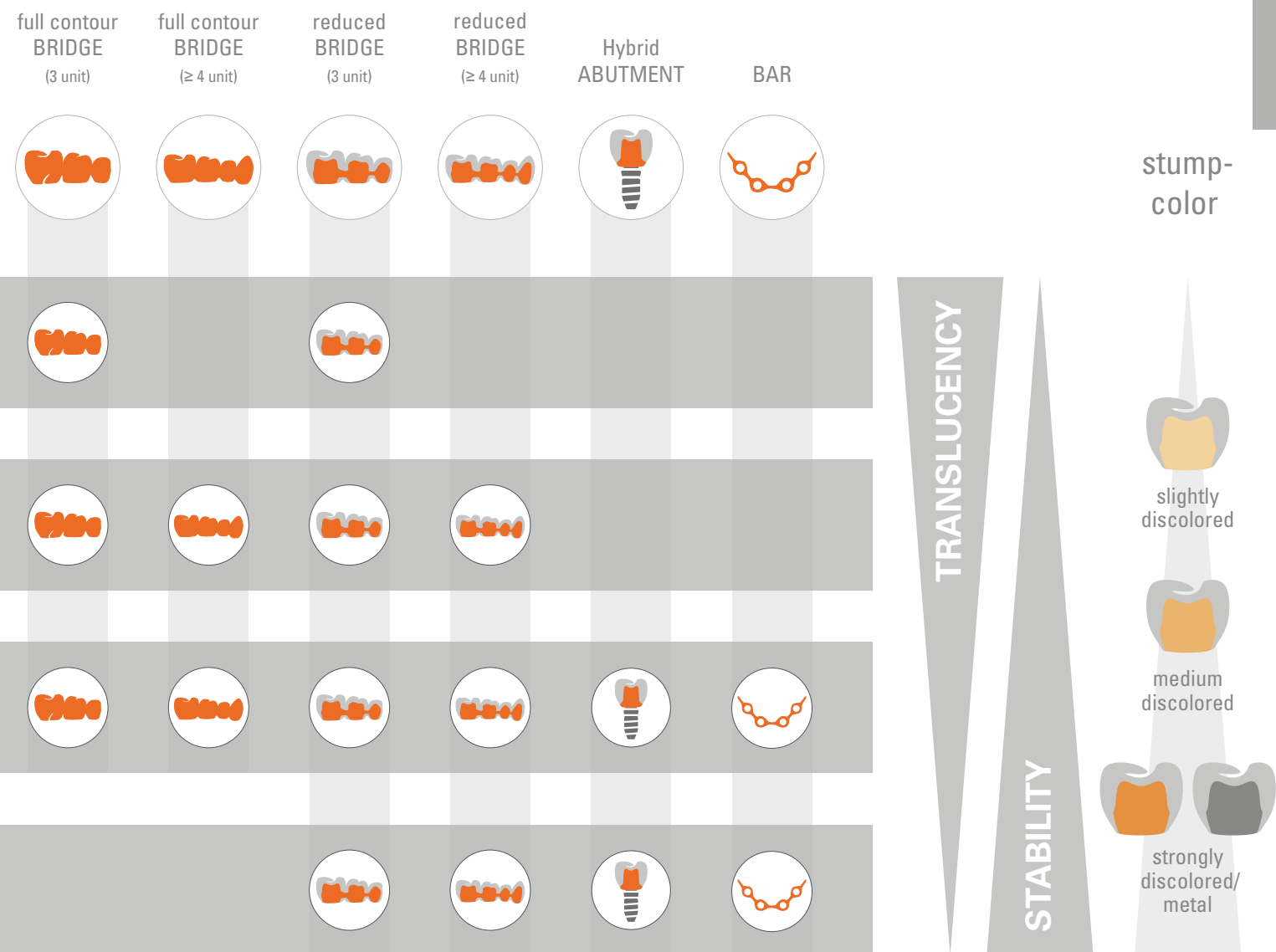
Influence on the final shade of a fixed restoration

When choosing a zirconia material for a specific clinical case several aspects should be considered, because the individual patients conditions might offer very different preconditions.

An important factor is the shade of the stump. If there is no serious deviation from the desired final shade of the fixed restoration, a super high translucent zirconia (DD cubeX²) might be the material of choice.

The quantity of substance removal by preparation can be significant as well, as it affects the wall thickness of the restoration.

The thinner a restoration the higher its translucency, the more an underlying tooth structure will influence the final shade appearance.



Indication guide_DD medical zirconia_Rev.05_2019/01

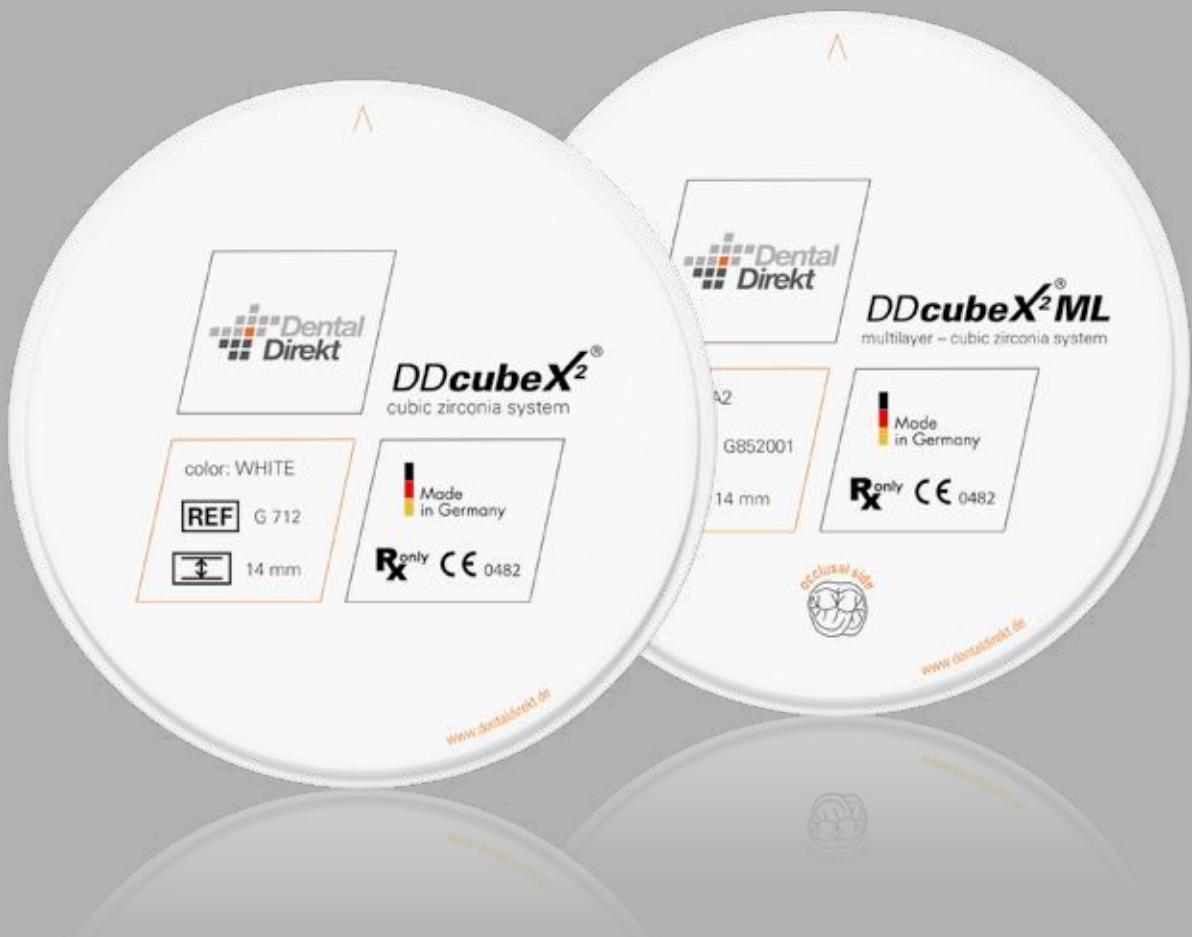
In case of a significantly discolored stump and preparation with low substance removal a more opaque zirconia (DD Bio ZX², DD Bio Z) could be used to cover up the underlying structure.

Especially when working with a high translucent plus (DD cube ONE®) or super high translucent zirconia material also the cement has to be well-chosen, taking its level of opacity and shade into consideration. Opaque or colored cementation materials might change the shade effect of super high translucent zirconia. Translucent cements on the other side hardly influence the interaction of tooth structure and restoration.



You find our cementation guide on www.dentaldirekt.de/en/downloads

DDcubeX²®



DDcubeX²[®]

cubic zirconia system

perfectly suitable for

- High aesthetic monolithic crowns and bridges (up to 3 units, including molar restorations)
- Especially for monolithic anterior restorations (bridges up to 3 units)
- Cut back (one layer)
- High aesthetic veneering



Technical data

Type	5Y-TZP
Classification	Class IIa according to MDD/MDR
Indication ISO 6872	Type II, class 4 – max. 3 unit bridges incl. molar restorations
Color	White
Aesthetics	Super High Translucent
Sintering temperature	1.450 °C
Bending strength	750 MPa (3 point test)
Fracture toughness	> 4,0 MPa/m
CAM system	Open systems for Ø 98,5 mm blanks
DD Coloring liquids	DD Pro Shade C DD Basic Shade DD Art Elements

Measure	Order-no.	Price (euro/net)
98,5 x 10 mm	G 710	149,00
98,5 x 12 mm	G 711	169,00
98,5 x 14 mm	G 712	179,00
98,5 x 16 mm	G 713	199,00
98,5 x 18 mm	G 714	219,00
98,5 x 20 mm	G 715	229,00
98,5 x 25 mm	G 716	259,00

Consult instructions for use.
Not all products are available in every country.

DDcubeX²ML[®]

multilayer – cubic zirconia system


perfectly suitable for

- High aesthetic monolithic crowns and bridges (up to 3 units, including molar restorations)
- Especially for monolithic anterior restorations (bridges up to 3 units)
- Cut back (one layer)
- High aesthetic veneering

Technical data	
Type	5Y-TZP
Classification	Class IIa according to MDD/MDR
Indication ISO 6872	Type II, class 4 – max. 3 unit bridges incl. molar restorations
Color	Precolored acc. to VITA [®]
Aesthetics	Super High Translucent
Sintering temperature	1.450 °C
Bending strength	800 MPa (3 point test)
Fracture toughness	> 4,0 MPa√m
CAM system	Open systems for Ø 98,5 mm blanks
Multi Additive Technology [®]	Reliable reproduction of color via industrial coloring



Measure	Bleach	A1	A2	A3	A3,5	A4	Price (euro/net)
98,5 x 14 mm	G852017	G852007	G852001	G852002	G852003	G852009	179,00
98,5 x 18 mm	G854017	G854007	G854001	G854002	G854003	G854009	219,00
98,5 x 22 mm	G856017	G856007	G856001	G856002	G856003	G856009	259,00

 Consult instructions for use.
Not all products are available in every country.



Measure	B1	B2	B3	B4	Price (euro/net)
98,5 x 14 mm	G852008	G852004	G852010	G852011	179,00
98,5 x 18 mm	G854008	G854004	G854010	G854011	219,00
98,5 x 22 mm	G856008	G856004	G856010	G856011	259,00



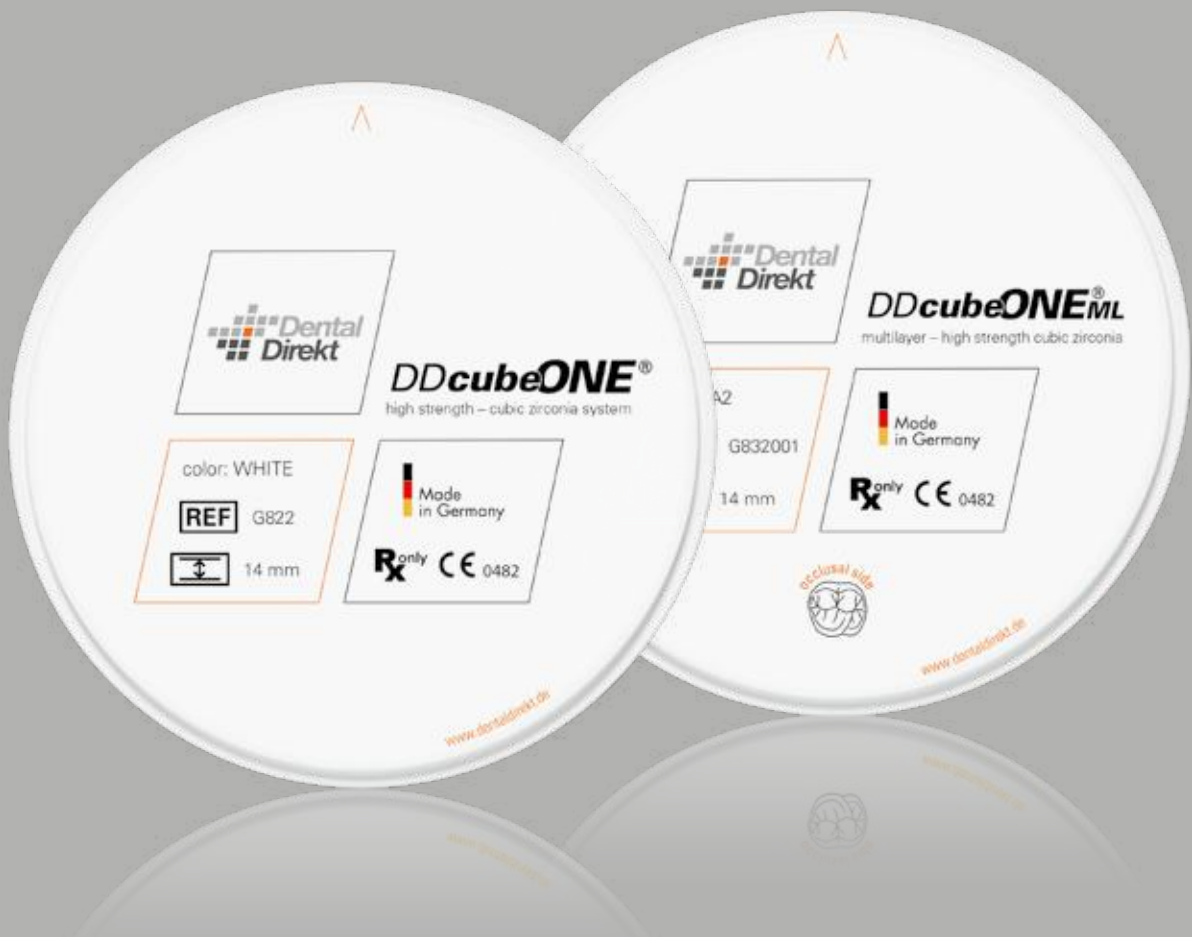
Measure	C1	C2	C3	C4	Price (euro/net)
98,5 x 14 mm	G852012	G852005	G852013	G852014	179,00
98,5 x 18 mm	G854012	G854005	G854013	G854014	219,00
98,5 x 22 mm	G856012	G856005	G856013	G856014	259,00



Measure	D2	D3	D4	Price (euro/net)
98,5 x 14 mm	G852015	G852006	G852016	179,00
98,5 x 18 mm	G854015	G854006	G854016	219,00
98,5 x 22 mm	G856015	G856006	G856016	259,00

Consult instructions for use.
Not all products are available in every country.

DDcubeONE®



DDcubeONE®

high strength – cubic zirconia system

perfectly suitable for

- High aesthetic monolithic crowns and bridges (≥ 4 units)
- Especially for monolithic anterior restorations (bridges ≥ 4 units)
- Cut back (one layer)
- High aesthetic veneering



Technical data	
Type	4Y-TZP
Classification	Class IIa according to MDD/MDR
Indication ISO 6872	Type II, class 5 – all dental constructions, all bridges ≥ 4 elements with max. 2 connected pontics
Color	White
Aesthetics	High Translucent Plus
Sintering temperature	1.450 °C
Bending strength	> 1.250 MPa (3 point test)
Fracture toughness	~ 10 MPa√m
CAM system	Open systems for Ø 98,5 mm blanks
DD Coloring liquids	DD Pro Shade Z DD Basic Shade DD Art Elements

Measure	Order-no.	Price (euro/net)
98,5 x 10 mm	G820	149,00
98,5 x 14 mm	G822	179,00
98,5 x 18 mm	G824	219,00
98,5 x 20 mm	G825	229,00
98,5 x 25 mm	G826	259,00

Consult instructions for use.
Not all products are available in every country.

DDcubeONE[®]ML

multilayer – high strength cubic zirconia


perfectly suitable for

- High aesthetic monolithic crowns and bridges (≥ 4 units)
- Especially for monolithic anterior restorations (bridges ≥ 4 units)
- Cut back (one layer)
- High aesthetic veneering

Technical data	
Type	4Y-TZP
Classification	Class IIa according to MDD/MDR
Indication ISO 6872	Type II, class 5 – all dental constructions, all bridges ≥ 4 elements with max. 2 connected pontics
Color	Precolored acc. to VITA [®]
Aesthetics	High Translucent Plus
Sintering temperature	1.450 °C
Bending strength	> 1.250 MPa (3 point test)
Fracture toughness	~ 10 MPa√m
CAM system	Open systems for Ø 98,5 mm blanks
Multi Additive Technology [®]	Reliable reproduction of color via industrial coloring



Measure	Bleach	A1	A2	A3	A3,5	A4	Price (euro/net)
98,5 x 14 mm	G832017	G832007	G832001	G832002	G832003	G832009	179,00
98,5 x 18 mm	G834017	G834007	G834001	G834002	G834003	G834009	219,00
98,5 x 22 mm	G836017	G836007	G836001	G836002	G836003	G836009	259,00

 Consult instructions for use.
Not all products are available in every country.



Measure	B1	B2	B3	B4	Price (euro/net)
98,5 x 14 mm	G832008	G832004	G832010	G832011	179,00
98,5 x 18 mm	G834008	G834004	G834010	G834011	219,00
98,5 x 22 mm	G836008	G836004	G836010	G836011	259,00

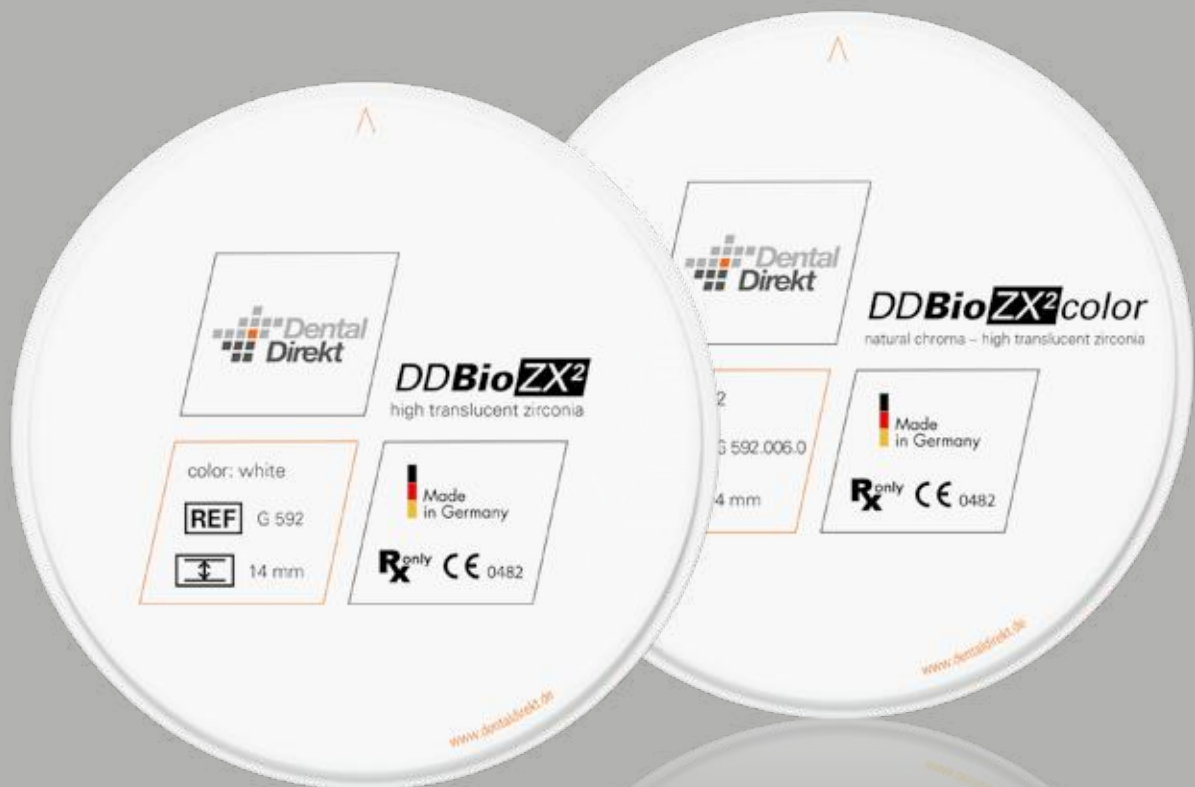


Measure	C1	C2	C3	C4	Price (euro/net)
98,5 x 14 mm	G832012	G832005	G832013	G832014	179,00
98,5 x 18 mm	G834012	G834005	G834013	G834014	219,00
98,5 x 22 mm	G836012	G836005	G836013	G836014	259,00



Measure	D2	D3	D4	Price (euro/net)
98,5 x 14 mm	G832015	G832006	G832016	179,00
98,5 x 18 mm	G834015	G834006	G834016	219,00
98,5 x 22 mm	G836015	G836006	G836016	259,00

DDBioZX²



DDBioZX²

high translucent zirconia


perfectly suitable for

- Monolithic crowns and bridges (of any span range)
- Especially for monolithic bridges ≥ 4 units
- Cut back (one layer)
- High aesthetic veneering (of any span range)



Technical data	
Type	3Y-TZP-LA
Classification	Class IIa according to MDD/MDR
Indication ISO 6872	Type II, class 5 – all dental constructions, all bridges ≥ 4 elements with max. 2 connected pontics
Color	White
Aesthetics	High Translucent
Sintering temperature	1.450 °C
Bending strength	1.100 MPa (4 point test)
Fracture toughness	> 10 MPa√m
CAM system	Open systems for Ø 98,5 mm blanks
DD Coloring liquids	DD Pro Shade Z DD Basic Shade DD Art Elements

Measure	Order-no.	Price (euro/net)
98,5 x 10 mm	G 590	119,00
98,5 x 12 mm	G 591	139,00
98,5 x 14 mm	G 592	149,00
98,5 x 16 mm	G 593	169,00
98,5 x 18 mm	G 594	189,00
98,5 x 20 mm	G 595	199,00
98,5 x 25 mm	G 596	229,00

 Consult instructions for use.
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DDBioZX²19

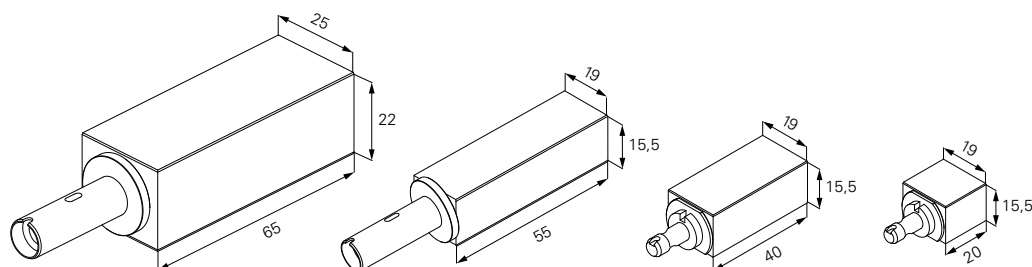
high translucent zirconia

Technical data	
Type	3Y-TZP-LA
Classification	Class IIa according to MDD/MDR
Indication ISO 6872	Type II, class 5 – all dental constructions, all bridges ≥ 4 elements with max. 2 connected pontics
Color	White
Aesthetics	High Translucent
Sintering temperature	1.450 °C
Bending strength	1.100 MPa (4 point test)
Fracture toughness	> 10 MPa√m
CAM system	Sirona inLab [®] and inLab [®] MC XL system
DD Coloring liquids	DD Pro Shade Z DD Basic Shade DD Art Elements




perfectly suitable for

- Monolithic crowns and bridges (of any span range)
- Especially for monolithic bridges ≥ 4 units
- Cut back (one layer)
- High aesthetic veneering (of any span range)



Article	DD Bio ZX ² 65/25	DD Bio ZX ² 55/19 MC XL	DD Bio ZX ² 40/19	DD Bio ZX ² 20/19
Order-no.	G 613	G 612.1	G 611	G 610
Measure in mm	65 x 25 x 22	55 x 19 x 15,5	40 x 19 x 15,5	20 x 19 x 15,5
Item	1	2	10	24
Price (euro/net)	89,00	99,00	249,00	319,00

 Consult instructions for use.
Not all products are available in every country.

DDBioZX²color

natural chroma – high translucent zirconia

perfectly suitable for

- Monolithic crowns and bridges (of any span range)
- Especially for monolithic bridges ≥ 4 units
- Cut back (one layer)
- High aesthetic veneering (of any span range)



Technical data	
Type	3Y-TZP-LA
Classification	Class IIa according to MDD/MDR
Indication ISO 6872	Type II, class 5 – all dental constructions, all bridges ≥ 4 elements with max. 2 connected pontics
Color	5 universal colors
Aesthetics	High Translucent
Sintering temperature	1.450 °C
Bending strength	1.250 MPa (3 point test)
Fracture toughness	> 10 MPa√m
CAM system	Open systems for Ø 98,5 mm blanks
Multi Additive Technology®	Reliable reproduction of color via industrial coloring



Measure	light A1 · A2 · B1 B2 · C1	medium A3 · B3 · B4 · C2 C3 · D2 · D3 · D4	intense A3,5 · A4 · C4	low chromatic A1 · A2 · A3 · B2 B3 · D2 · D3	high chromatic A3,5 · A4 · B4	Price (euro/net)
98,5 x 10 mm	G 590.001.0	G 590.002.0	G 590.003.0	G 590.004.0	G 590.005.0	139,00
98,5 x 14 mm	G 592.001.0	G 592.002.0	G 592.003.0	G 592.004.0	G 592.005.0	159,00
98,5 x 18 mm	G 594.001.0	G 594.002.0	G 594.003.0	G 594.004.0	G 594.005.0	199,00
98,5 x 20 mm	G 595.001.0	G 595.002.0	G 595.003.0	G 595.004.0	G 595.005.0	214,00
98,5 x 25 mm	G 596.001.0	G 596.002.0	G 596.003.0	G 596.004.0	G 596.005.0	249,00

Consult instructions for use.
Not all products are available in every country.

DDBioZX²color

natural chroma – high translucent zirconia according to VITA® shades

perfectly suitable for

- Monolithic crowns and bridges (of any span range)
- Especially for monolithic bridges ≥ 4 units
- Cut back (one layer)
- High aesthetic veneering (of any span range)



Technical data

Type	3Y-TZP-LA
Classification	Class IIa according to MDD/MDR
Indication ISO 6872	Type II, class 5 – all dental constructions, all bridges ≥ 4 elements with max. 2 connected pontics
Color	Precolored acc. to VITA®
Aesthetics	High Translucent
Sintering temperature	1.450 °C
Bending strength	1.250 MPa (3 point test)
Fracture toughness	> 10 MPa√m
CAM system	Open systems for Ø 98,5 mm blanks
Multi Additive Technology®	Reliable reproduction of color via industrial coloring



Measure	A1	A2	A3	A3,5	A4	Price (euro/net)
98,5 x 10 mm	G 590.012.0	G 590.006.0	G 590.007.0	G 590.008.0	G 590.013.0	139,00
98,5 x 14 mm	G 592.012.0	G 592.006.0	G 592.007.0	G 592.008.0	G 592.013.0	159,00
98,5 x 18 mm	G 594.012.0	G 594.006.0	G 594.007.0	G 594.008.0	G 594.013.0	199,00
98,5 x 20 mm	G 595.012.0	G 595.006.0	G 595.007.0	G 595.008.0	G 595.013.0	214,00
98,5 x 25 mm	G 596.012.0	G 596.006.0	G 596.007.0	G 596.008.0	G 596.013.0	249,00

Consult instructions for use.
Not all products are available in every country.



Measure	B1	B2	B3	B4	Price (euro/net)
98,5 x 10 mm	G 590.014.0	G 590.009.0	G 590.015.0	G 590.016.0	139,00
98,5 x 14 mm	G 592.014.0	G 592.009.0	G 592.015.0	G 592.016.0	159,00
98,5 x 18 mm	G 594.014.0	G 594.009.0	G 594.015.0	G 594.016.0	199,00
98,5 x 20 mm	G 595.014.0	G 595.009.0	G 595.015.0	G 595.016.0	214,00
98,5 x 25 mm	G 596.014.0	G 596.009.0	G 596.015.0	G 596.016.0	249,00



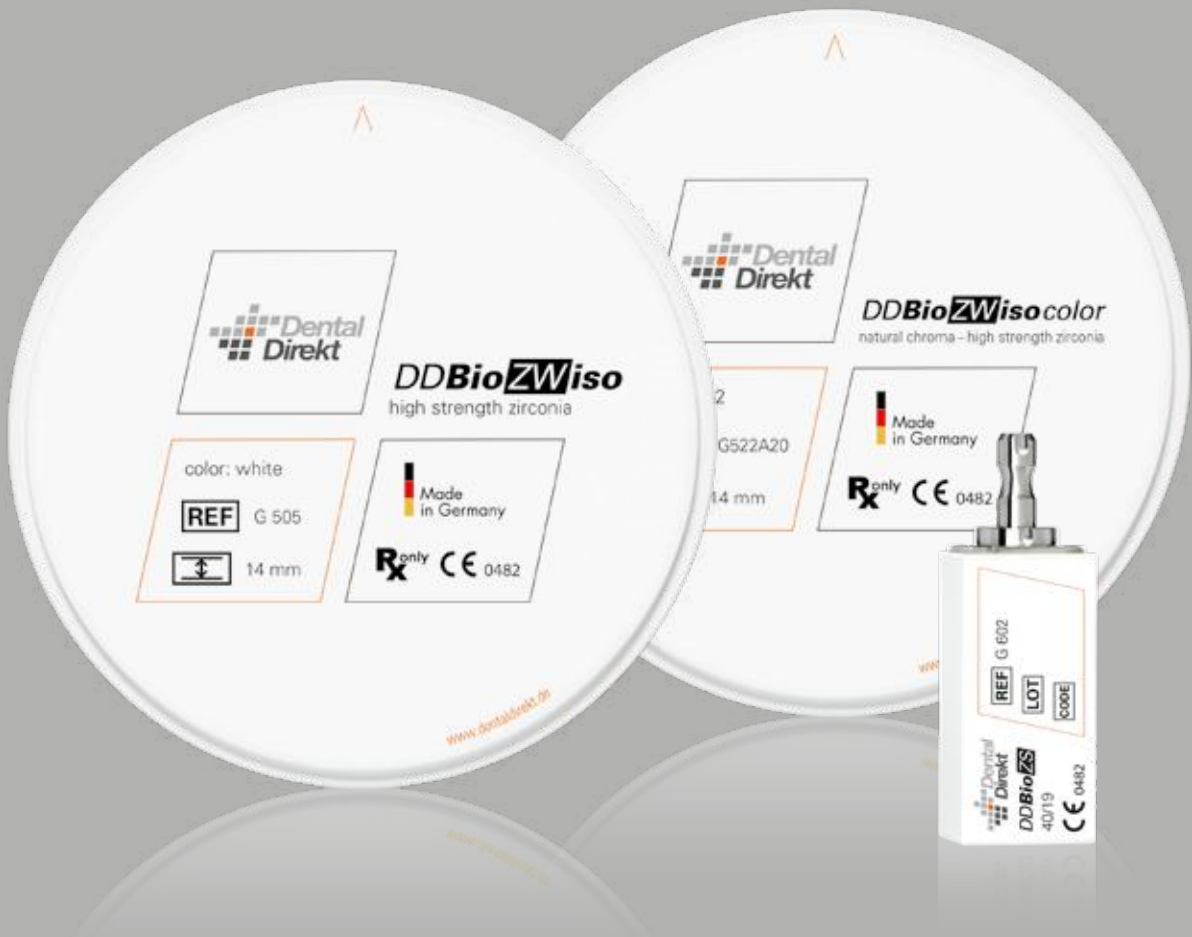
Measure	C1	C2	C3	C4	Price (euro/net)
98,5 x 10 mm	G 590.017.0	G 590.010.0	G 590.018.0	G 590.019.0	139,00
98,5 x 14 mm	G 592.017.0	G 592.010.0	G 592.018.0	G 592.019.0	159,00
98,5 x 18 mm	G 594.017.0	G 594.010.0	G 594.018.0	G 594.019.0	199,00
98,5 x 20 mm	G 595.017.0	G 595.010.0	G 595.018.0	G 595.019.0	214,00
98,5 x 25 mm	G 596.017.0	G 596.010.0	G 596.018.0	G 596.019.0	249,00



Measure	D2	D3	D4	Price (euro/net)
98,5 x 10 mm	G 590.020.0	G 590.011.0	G 590.021.0	139,00
98,5 x 14 mm	G 592.020.0	G 592.011.0	G 592.021.0	159,00
98,5 x 18 mm	G 594.020.0	G 594.011.0	G 594.021.0	199,00
98,5 x 20 mm	G 595.020.0	G 595.011.0	G 595.021.0	214,00
98,5 x 25 mm	G 596.020.0	G 596.011.0	G 596.021.0	249,00

Consult instructions for use.
Not all products are available in every country.

DDBioZ



DDBioZWiso

high strength zirconia


perfectly suitable for

- Aesthetic veneering, crowns, bridges of any span range
- Implant superstructures
- Abutments



Technical data	
Type	3Y-TZP-A
Classification	Class IIa according to MDD/MDR
Indication ISO 6872	Type II, class 5 – all dental constructions, all bridges ≥ 4 elements with max. 2 connected pontics
Color	White
Aesthetics	Opaque
Sintering temperature	1.450 °C
Bending strength	1.300 MPa (4 point test)
Fracture toughness	> 9 MPa√m
CAM system	Open systems for Ø 98,5 mm blanks
DD Coloring liquids	DD Pro Shade Z DD Basic Shade DD Art Elements

Measure	Order-no.	Price (euro/net)
98,5 x 10 mm	G 513	109,00
98,5 x 12 mm	G 526	129,00
98,5 x 14 mm	G 505	139,00
98,5 x 16 mm	G 527	159,00
98,5 x 18 mm	G 506	179,00
98,5 x 20 mm	G 507	189,00
98,5 x 25 mm	G 553	219,00

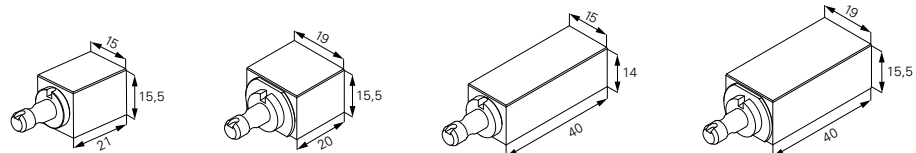
 Consult instructions for use.
Not all products are available in every country.

DDBioZS high strength zirconia

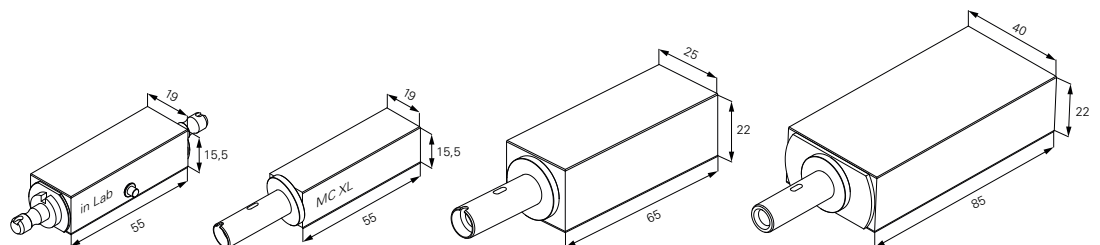
perfectly suitable for

- Aesthetic veneering, crowns, bridges of any span range
- Implant superstructures
- Abutments

Technical data	
Type	3Y-TZP-A
Classification	Class IIa according to MDD/MDR
Indication ISO 6872	Type II, class 5 – all dental constructions, all bridges ≥ 4 elements with max. 2 connected pontics
Color	White
Aesthetics	Opaque
Sintering temperature	1.450 °C
Bending strength	1.300 MPa (4 point test)
Fracture toughness	> 9 MPa√m
CAM system	Sirona inLab® and inLab® MC XL system
DD Coloring liquids	DD Pro Shade Z DD Basic Shade DD Art Elements



Article	DD Bio ZS 21/15	DD Bio ZS 20/19	DD Bio ZS 40/15	DD Bio ZS 40/19
Order-no.	G 603	G 600	G 601	G 602
Measure in mm	21 x 15 x 15,5	20 x 19 x 15,5	40 x 15 x 14	40 x 19 x 15,5
Item	25	24	10	10
Price (euro/net)	285,00	319,00	239,00	249,00



Article	DD Bio ZS 55/19 inLab	DD Bio ZS 55/19 MC XL	DD Bio ZS 65/25	DD Bio ZS 85/40
Order-no.	G 604	G 604.1	G 605	G 607
Measure in mm	55 x 19 x 15,5	55 x 19 x 15,5	65 x 25 x 22	85 x 40 x 22
Item	2	2	1	1
Price (euro/net)	99,00	99,00	89,00	189,00

Consult instructions for use.
Not all products are available in every country.

DDBioZWiso color high strength zirconia

perfectly suitable for

- Aesthetic veneering, crowns, bridges of any span range
- Implant superstructures
- Abutments



Technical data	
Type	3Y-TZP-A
Classification	Class IIa according to MDD/MDR
Indication ISO 6872	Type II, class 5 – all dental constructions, all bridges ≥ 4 elements with max. 2 connected pontics
Color	5 universal colors
Aesthetics	Opaque
Sintering temperatur	1.450 °C
Bending strength	1.450 MPa (3 point test)
Fracture toughness	> 9 MPa√m
CAM system	Open systems for Ø 98,5 mm blanks



Measure	500 A1 · A2	800 A3 · B3	1000 C2 · C3	1333 A3,5 · B4	2000 A4	Price (euro/net)
98,5 x 10 mm	G 520.500.0	G 520.800.0	G 520.1000.0	G 520.1333.0	G 520.2000.0	129,00
98,5 x 14 mm	G 522.500.0	G 522.800.0	G 522.1000.0	G 522.1333.0	G 522.2000.0	149,00
98,5 x 18 mm	G 524.500.0	G 524.800.0	G 524.1000.0	G 524.1333.0	G 524.2000.0	189,00
98,5 x 20 mm	G 525.500.0	G 525.800.0	G 525.1000.0	G 525.1333.0	G 525.2000.0	204,00
98,5 x 25 mm	G 526.500.0	G 526.800.0	G 526.1000.0	G 526.1333.0	G 526.2000.0	239,00

Consult instructions for use.
Not all products are available in every country.

DDBioZWisocolor

high strength zirconia
according to VITA® shades

perfectly suitable for

- Aesthetic veneering, crowns, bridges of any span range
- Implant superstructures
- Abutments

Technical data	
Type	3Y-TZP-A
Classification	Class IIa according to MDD/MDR
Indication ISO 6872	Type II, class 5 – all dental constructions, all bridges ≥ 4 elements with max. 2 connected pontics
Color	Precolored acc. to VITA®
Aesthetics	Opaque
Sintering temperature	1.450 °C
Bending strength	1.450 MPa (3 point test)
Fracture toughness	> 9 MPa√m
CAM system	Open systems for Ø 98,5 mm blanks



Measure	A1	A2	A3	A3,5	Price (euro/net)
98,5 x 10 mm	G520A10	G520A20	G520A30	G520A350	129,00
98,5 x 14 mm	G522A10	G522A20	G522A30	G522A350	149,00
98,5 x 18 mm	G524A10	G524A20	G524A30	G524A350	189,00
98,5 x 20 mm	G525A10	G525A20	G525A30	G525A350	204,00
98,5 x 25 mm	G526A10	G526A20	G526A30	G526A350	239,00



Measure	B1	B2	C1	D2	Price (euro/net)
98,5 x 10 mm	G520B10	G520B20	G520C10	G520D20	129,00
98,5 x 14 mm	G522B10	G522B20	G522C10	G522D20	149,00
98,5 x 18 mm	G524B10	G524B20	G524C10	G524D20	189,00
98,5 x 20 mm	G525B10	G525B20	G525C10	G525D20	204,00
98,5 x 25 mm	G526B10	G526B20	G526C10	G526D20	239,00

Consult instructions for use.
Not all products are available in every country.

High Performance Polymers

044

DDBioSplint^{PHI}

high impact thermoplastic

PMMA for occlusal splints

DD Bio Splint P HI blanks consist of thermoplastic acrylic polymer based on polymethylmethacrylate (PMMA), with no toxic or allergenic materials. Using CAD/CAM technology, you will achieve a perfect fit with no re-machining. Thanks to our manufacturing process, the material is absolutely free of distortion and strain for a perfect fit.

Your benefits:


- Biocompatible – medical thermoplastic, no chemoplastic!
- Industrially polymerised – minimal residual monomer content
- High fracture resistance and long-term stability (bruxism treatment)
- Lowest water absorption – long-term stability of the fit
- Good polishing properties – smooth surfaces are less susceptible to discoloration and plaque deposits, which at the same time minimizes the risk of inflammation.



Technical data

Material	100% Polymethyl methacrylate (PMMA)
Classification	Class IIa according to MDD/MDR
Indication	Bite guard splint, therapeutic splints, bite regulators (Due to its properties, the material is indicated for the oral cavity up to 12 month.)
Color	clear
Flexural strength ISO 178	92 MPa
Charpy impact strength +23°C ISO 179/1eU	45 kJ/m ²
Density ISO 1183	1,17 g/cm ³
Water absorption ISO 20795-1	0,02 µg/mm ³
Solubility ISO 20795-1	0,0 µg/mm ³
Residual monomer ISO 20795-1	< 0,7 %
CAM system	open systems for Ø 98,5 mm blanks

Measure	Order-no.	Price (euro/net)
98,5 x 15 mm	K40115	29,00
98,5 x 20 mm	K40120	35,00
98,5 x 25 mm	K40125	40,00
98,5 x 30 mm	K40130	49,00

 Consult instructions for use.
Not all products are available in every country.

DDBioSplint^C

innovative polycarbonate

Polycarbonate for occlusal splints

DD Bio Splint C blanks consist of a biocompatible High-Tech-Polymer based on a medical polycarbonate. We have developed this material innovation as the ideal material for CAM-manufactured bite splints. Using CAD/CAM technology, you will achieve a perfect fit with no re-machining. Thanks to our manufacturing process, the material is absolutely free of distortion and strain for a perfect fit.

Your benefits:

- Biocompatible – medical thermoplastic, no chemoplastic!
- Industrially polymerised – absolutely low residual monomer content
- High fracture resistance and continuous flexural load (treatment of bruxism)
- Plaque resistant – lowest water absorption – dense structure
- Good polishing properties
- Shatterproof with added elasticity, (high) resilience
- Suitable for hot steam sterilization at 121 °C



Technical data

Material	100% Polycarbonate (PC)
Classification	Class I according to MDD/MDR
Indication	Bite guard splint, therapeutic splints, bite regulators, drilling templates (Due to its properties, the material is indicated for the oral cavity up to 30 days.)
Farbe	clear/slightly bluish
Flexural strength ISO 20795-1	≥ 98 MPa
Flexural modulus ISO 20795-1	> 2.300 MPa
Water absorption ISO 20795-1	3,6 µg/mm ³
Solubility ISO 20795-1	0,2 µg/mm ³
residual monomer content ISO 20795-1	≤ 0,0015 %
CAM system	open systems for Ø 98,5 mm blanks

Measure	Order-no.	Price (euro/net)
98,5 x 15 mm	K 2.01.15	39,00
98,5 x 20 mm	K 2.01.20	45,00



Consult instructions for use.

Not all products are available in every country.

DDBioSplint**FLEX**

flexible thermoplastic

PET-G for bite splints

The DD Bio Splint FLEX blanks are made of a thermoplastic copolymer based on a medical grade PET-G. The material is characterized by high flexibility and simultaneously high impact strength. Free of toxic and allergenic substances, DD Bio Splint FLEX is ideal for patients with intolerances.


Your benefits:

- Highly flexible
- No risk of fracture
- Improved patient comfort
- Very good polishability
- Bonding to conventional polymers possible



Technical data	
Material	Polyethyleneterephthalat-Glycol (PET-G)
Classification	Class I according to MDD/MDR
Indication	Bite splints, therapeutic splints of all kinds, bleaching splints (Due to its properties the material is indicated for up to 30 days in the oral cavity)
Flexural strength ISO 20795-1	clear
Flexural modulus ISO 20795-1	≥ 58 MPa
Flexural strength ISO 20795-1	≥ 1.370 MPa
Water absorption ISO 20795-1	≥ 3 MPa m ^{1/2}
Solubility ISO 20795-1	6 µg/mm ³
residual monomer content ISO 20795-1	< 0,25 µg/mm ³
CAM system	open systems for Ø 98,5 mm blanks

Measure	Order-no.	Price (euro/net)
98,5 x 20 mm	K60120	55,00

 Consult instructions for use.
Not all products are available in every country.

DDtempMED

high translucent polymers

Acrylic Polymer

DD temp MED blanks consist of thermoplastic acrylic polymer based on polymethyl methacrylate (PMMA), with no toxic or allergenic materials.


Your benefits:

- Biocompatible – medical polymer material
- Industrially polymerised – absolutely low residual monomer content
- High fracture resistance and continuous flexural load
- Plaque resistant – lowest water absorption – dense structure
- Good polishing properties

Technical data	
Material	Polymethyl methacrylate (PMMA)
Classification	Class IIa according to MDD/MDR
Indication	pre-colored dental milling blanks for the production of temporary crowns and bridges (Due to its properties, the material is indicated for the oral cavity up to 12 month.)
Flexural strength ISO 20795-1	78 – 90 MPa
Flexural modulus ISO 20795-1	2.300 – 2.988 MPa
Water absorption ISO 20795-1	19 – 25 µg/mm ³
Solubility ISO 20795-1	0,3 – 0,7 µg/mm ³
Residual monomer content ISO 20795-1	< 2 %
CAM system	open systems for Ø 98,5 mm blanks
Chemical Composition [Weight %]	
Polymethyl methacrylate (PMMA)	99 – 99,8
Coloring pigments	0,2 – 1



Measure	Bleach	A1	A2	A3	A3,5	B2	C2	D3	Price (euro/net)
98,5 x 15 mm	–	K 1.16.15	K 1.10.15	K 1.11.15	K 1.12.15	K 1.13.15	K 1.15.15	K 1.14.15	29,00
98,5 x 16 mm	K42216	–	–	–	–	–	–	–	32,00
98,5 x 20 mm	K42220	K 1.16.20	K 1.10.20	K 1.11.20	K 1.12.20	K 1.13.20	K 1.15.20	K 1.14.20	35,00
98,5 x 25 mm	K42225	–	–	–	–	–	–	–	39,00

 Consult instructions for use.
Not all products are available in every country.

DDpolyX ML

multilayer – natural colored polymers

Acrylic Polymer

DD poly X ML blanks consist of multilayer acrylic polymer based on polymethyl methacrylate (PMMA) without toxic or allergenic materials (according to ISO 10993-5).

Your benefits:

- 5 layers polymerized – very natural aesthetic effect
- Biocompatible – medical polymer material
- Industrially polymerised – low residual monomer content
- High fracture resistance and continuous flexural load
- Plaque resistant – low water absorption – dense structure
- Good polishing properties and abrasion resistance



Technical data	
Material	Polymethyl methacrylate (PMMA)
Classification	Class IIa according to MDD/MDR
Indication	suitable for making removable or temporary dental structures such as crowns and bridges (For temporary restorations, the material is indicated for the oral cavity up to 12 month.)
Flexural strength ISO 10477	90 MPa
Flexural modulus ISO 20795-1	2.300 MPa
Water absorption ISO 10477	25 µg/mm ³
Solubility ISO 10477	0,0 µg/mm ³
residual monomer content ISO 20795-1	< 2 %
CAM system	open systems for Ø 98,5 mm blanks
Chemical Composition [Weight %]	
Polymethyl methacrylate (PMMA)	> 99
Coloring pigments	< 1



Measure	A1	A2	A3	B0	B3	C2	Price (euro/net)
98,5 x 16 mm	KML0116	KML0216	KML0316	KML0416	KML0516	KML0616	69,00
98,5 x 20 mm	KML0120	KML0220	KML0320	KML0420	KML0520	KML0620	75,00

Consult instructions for use.
Not all products are available in every country.

DDbase^{PHI}

high impact thermoplastic

PMMA for digital denture bases

DD base P HI is based on the raw material of our proven DD Bio Splint P HI, a thermoplastic acrylic polymer based on polymethylmethacrylate (PMMA). Free of toxic and allergenic substances, the material is ideally suited for the production of digital denture bases. Our manufacturing process makes the material quick and easy to work with and guarantees a perfect fit of the denture base.

Your benefits:

- Milling times significantly reduced
- Increased tool life
- Very good bond to denture teeth
- Available in four colors



Technical data

Material	100% Polymethyl methacrylate (PMMA) + dyes
Classification	Class IIa according to MDD/MDR
Indication	Suitable for the fabrication of digital complete and partial dentures (Due to the properties, the material is indicated for ≤ 10 years of use in the oral cavity).
Flexural strength ISO 20795-1	65 MPa
Flexural modulus ISO 20795-1	2.030 MPa
Flexural strength ISO 20795-1	2,6 µg/mm ^{1/2}
Water absorption ISO 20795-1	24 µg/mm ³
Solubility ISO 20795-1	0,3 µg/mm ³
residual monomer content ISO 20795-1	< 0,5 %
CAM system	open systems for Ø 98,5 mm blanks



Measure	light pink	pink	sun	rouge	Price (euro/net)
98,5 x 30 mm	K50230	K50130	K50330	K50430	69,00



Consult instructions for use.

Not all products are available in every country.

DDpeekMED

the polymer steel

Medical PEEK

DD peek MED is the ideal combination of biocompatibility and ultimate strength.

Polyether ether ketone (PEEK) has a modulus of elasticity similar to human bone and is thus extremely wear-resistant. These attributes have made it a highly sought-after material in surgical endoprosthetics. Compared with titanium implants, stress peaks at the interface to the bones are reduced. Dental constructions also benefit from this property. This reduces the load on screw and adhesive bonds of the dental prosthesis as well. An ideal material for heavily load-bearing indications. Its total biocompatibility underscores the material through its inert property against body fluids.

Your benefits:

- Monomer-free
- Extremely loadable and wear-resistant
- Low density – very light
- Suitable for allergy patients
- Outstanding sliding qualities (telescopes)


Technical data	
Material	Polyether ether ketone (PEEK)
Classification	Class IIa according to MDD/MDR
Indication	For the manufacture of fixed or removable dental framework constructions for long-term use. e.g. abutments and cervical gingival formers, bar constructions, tertiary constructions, telescope crowns, transversal links (due to its properties, the material is indicated for permanent use in the oral cavity)
Flexural strength* ISO 20795-1	≥ 155 MPa
Flexural modulus* ISO 20795-1	≥ 3,8 GPa
Density* ISO 1183	1,5 g/cm ³
Water absorption* ISO 20795-1	0,0 µg/mm ³
Solubility* ISO 20795-1	0,0 µg/mm ³
CAM system	open systems for Ø 98,5 mm blanks

*Value determination based on DD peek MED natural

Chemical Composition [Weight %]				
	natural	white	dentine	gingiva
Polyether ether ketone (PEEK)	≥ 99,99	≥ 80	≥ 80	> 90
Titanium oxide	–	< 20	< 20	< 5
Further Additives	< 0,01	< 0,1	< 1	< 1



Measure	white	dentine	natural	gingiva	Price (euro/net)
98,5 x 14 mm	K 3.01.14	K 3.02.14	K 3.03.14	K 3.04.14	189,00
98,5 x 18 mm	K 3.01.18	K 3.02.18	K 3.03.18	K 3.04.18	229,00
98,5 x 23 mm	K 3.01.23	K 3.02.23	K 3.03.23	K 3.04.23	279,00

 Consult instructions for use.
Not all products are available in every country.

More Materials

05

DDBioCW

Milling blank based on CoCr

The DD Bio CW Blanks provide a high level of working safety and guarantees reliably good quality. The DD Bio CW blank is resistant to corrosion, biocompatible and free of nickel and beryllium. Outstanding aesthetic results can be achieved by a veneering with a material-specific veneering ceramic. The adherence oxide formers provide an optimal bond between metal and ceramic.

The DD Bio CW blank has been treated with a special heat treatment, which makes the alloy easy to machine and gives it outstanding properties due to a uniform microstructure.




Technical data

Density	8,8 g/cm ³
E modulus	250 GPa
CTE (25 – 500°C)	14,4 10 ⁻⁶ K ⁻¹
Vickers hardness	285 HV10
Elongation at break	9 %
CAM system	open systems for Ø 98,5 mm blanks

Chemical composition [Weight %]

Co	63
Cr	29
Mo	6
Nb, Si, Mn, Fe	< 1

Measure	Order-no.	Price (euro/net)
98,5 x 8 mm	G 900	159,00
98,5 x 10 mm	G 901	179,00
98,5 x 12 mm	G 902	199,00
98,5 x 13,5 mm	G 903	219,00
98,5 x 15 mm	G 904	229,00
98,5 x 18 mm	G 905	259,00

 Consult instructions for use.
Not all products are available in every country.

DDcamWAX

Wax for casting technique

Synthetic wax blanks utilised for the production of combustible wax frameworks that leave no residue. DD CAM wax blanks are distinguished by excellent milling properties and form a fine chip during the machining that does not clog milling cutters (non-medical product).



Specification

CAM system open systems for Ø 98,5 mm blanks

Measure	Order-no.	Color	Price (euro/net)
98,5 x 20 mm	G 529	gray	29,00

DDcalibrationdisc

The DD calibration disc made of Polyurethane is used to calibrate your milling machine. After milling a special calibration body, you measure them and enter these values into the program. The milling machine will guide you through the calibration process step by step (non-medical product).



Specification

CAM system open systems for Ø 98,5 mm blanks

Measure	Order-no.	Color	Price (euro/net)
98,5 x 15 mm	G 944	brown	19,90



Consult instructions for use.

Not all products are available in every country.

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CLOSE TO YOU

