



[2022]

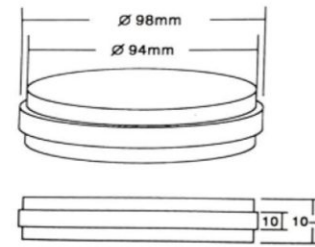
USER MANUAL

DENTAL ZIRCONIA CERAMICS BLOCK

Zotion zirconia ceramics block



Specifications

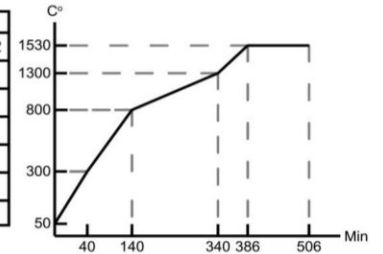


Open system zirconia	Girrbach System Zirconia	Zirkzahn System Zirconia
D98×10(H)	AG71×10(H)	D95×10(H)
D98×12(H)	AG71×12(H)	D95×12(H)
D98×14(H)	AG71×14(H)	D95×14(H)
D98×16(H)	AG71×16(H)	D95×16(H)
D98×18(H)	AG71×18(H)	D95×18(H)
D98×20(H)	AG71×20(H)	D95×20(H)
D98×22(H)	AG71×22(H)	D95×22(H)
D98×24(H)	AG71×24(H)	D95×24(H)

Sintering Chart

chart 1: (Bridge, Bridged crown) ≤ 4 units, single crown

Step	Start Temperature (°C)	End Temperature (°C)	Time (Min)	Speed (°C/min)
1	50	-2.0	0	Start from step2
2	50	300	40	7.5
3	300	800	100	5
4	800	1300	200	2.5
5	1300	1530	46	5
6	1530	1530	120	holding
7	1530	Room temperature	-121.0	Natural Cool



Tips: The max speed is better less than 20 C/min
Natural cool (Keep furnace door closed until the temperature down to room temperature)

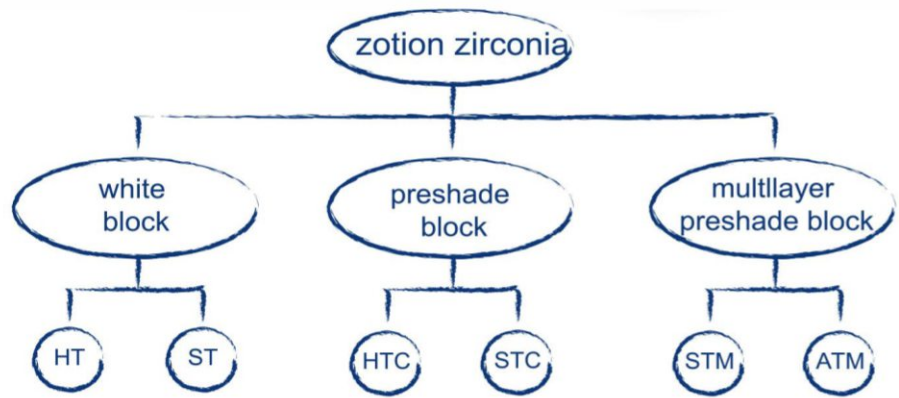
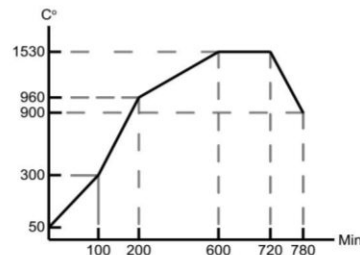


chart 2: Bridge > 4 units

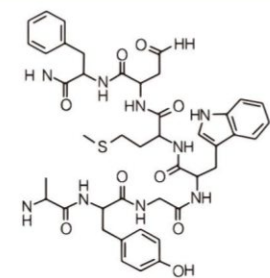


Step	Start Temperature (°C)	End Temperature (°C)	Time (Min)	Speed (°C/min)
8	50	300	100	2.5
9	300	960	100	6.6
10	960	1530	400	1.4
11	1530	1530	120	holding
12	1530	900	60	10.3
13	900	Room temperature	-121	Natural Cool

Tips: The max speed is better less than 20 C/min
Natural cool (Keep furnace door closed until the temperature down to room temperature)

Chemical composition

- ZrO₂+HfO₂+Y₂O₃ ≥99%
- Y₂O₃ ≤6.0%
- HfO₂ < 5.0%
- Al₂O₃ < 0.5%
- Other oxides < 0.5%



Zotion zirconia ceramics block--HT



Translucency

≥41%

Three point bending strength

1200-1400Mpa

Product advantage

HT zirconia block possesses high intensity and excellent translucency and is suitable for full ceramic copings and all kinds of bridges.

Technical parameters

Density before sintering	>3.15±0.05 g/cm ³
Density after sintering	>6.0 g/cm ³
Linear expansion coefficient	(10.3±0.5)×10 ⁻⁶ K ⁻¹
Three point bending strength	1400 Mpa
Translucency	≥41%
Chemical solubility after sintering	<100 µg/cm ²
Cytotoxicity test	Cytotoxicity 0 level
Radioactivity after sintering	<0.1 Bq/g
Sintering temperature	1480~1530°C, 1520°C is recommend



Restoration indication symptom

Coping		✓
Bridged Coping		✓
3-4 units bridge		✓
5-6 units bridge		✓
Over 7 units bridge		✓
Cantilever bridge		✓
Inlay bridge		✓
Maryland fixed bridge		✓
Telescope crown		✓
Abutment		✓

Zotion zirconia ceramics block--ST



Translucency

≥44%

Three point bending strength

900-1200Mpa

Product advantage

ST zirconia block with high intensity and transparency is suitable for making anatomic crowns and copings of anterior teeth.

Technical parameters

Density before sintering	>3.15±0.05 g/cm ³
Density after sintering	>6.0 g/cm ³
Linear expansion coefficient	(10.3±0.5)×10 ⁻⁶ K ⁻¹
Three point bending strength	1200 Mpa
Translucency	≥44%
Chemical solubility after sintering	<100 µg/cm ²
Cytotoxicity test	Cytotoxicity 0 level
Radioactivity after sintering	<0.1 Bq/g
Sintering temperature	1480~1530°C, 1520°C is recommend



Restoration indication symptom

Coping		✓
Bridged Coping		✓
3-4 units bridge		✓
5-6 units bridge		✓
Over 7 units bridge		✗
Cantilever bridge		✓
Inlay bridge		✓
Maryland fixed bridge		✓
Telescope crown		✓
Abutment		✓

Zotion zirconia ceramics block--HTC



Translucency

≥41%

Three point bending strength

1200-1400Mpa

Color

A1,A2,A3,A3.5 A4,B1,B2,B3
B4,C1,C2,C3,C4,D2,D3,D4
BL1,BL2,BL3,BL4

Product advantage

HTC(High-translucent preshade dental zirconia ceramics block) is pre-dyed on the basis of colorless high-translucent zirconia ceramics block. The denture does not need dyeing , and is suitable for inner crown and inner crown bridge.

Technical parameters

Density before sintering	>3.15±0.05 g/cm ³
Density after sintering	>6.0 g/cm ³
Linear expansion coefficient	(10.3±0.5)×10 ⁻⁶ K ⁻¹
Three point bending strength	1400 Mpa
Translucency	≥41%
Chemical solubility after sintering	<100 µg/cm ²
Cytotoxicity test	Cytotoxicity 0 level
Radioactivity after sintering	<0.1 Bq/g
Sintering temperature	1480~1530°C,1520°C is recommend



Restoration indication symptom

Coping		✓
Bridged Coping		✓
3-4 units bridge		✓
5-6 units bridge		✓
Over 7 units bridge		✓
Cantilever bridge		✓
Inlay bridge		✓
Maryland fixed bridge		✓
Telescope crown		✓
Abutment		✓

Zotion zirconia ceramics block--STC



Translucency

≥44%

Three point bending strength

900-1200Mpa

Color

A1,A2,A3,A3.5 A4,B1,B2,B3
B4,C1,C2,C3,C4,D2,D3,D4
BL1,BL2,BL3,BL4

Product advantage

STC is preshade ST. It possesses high intensity,transparency and natural vivid color and it doesn't need dyeing process.

Technical parameters

Density before sintering	>3.15±0.05 g/cm ³ v
Density after sintering	>6.0 g/cm ³
Linear expansion coefficient	(10.3±0.5)x10 ⁻⁶ K ⁻¹
Three point bending strength	1200 Mpa
Translucency	≥44%
Chemical solubility after sintering	<100 µg/cm ²
Cytotoxicity test	Cytotoxicity 0 level
Radioactivity after sintering	<0.1 Bq/g
Sintering temperature	1480~1530°C,1520°C is recommend



Restoration indication symptom

Coping		✓
Bridged Coping		✓
3-4 units bridge		✓
5-6 units bridge		✓
Over 7 units bridge		✓
Cantilever bridge		✓
Inlay bridge		✓
Maryland fixed bridge		✓
Telescope crown		✓
Abutment		✓

Zotion zirconia ceramics block--STM



Translucency

≥49% ⇔ 43%

Three point bending strength

≥800 ⇔ 1250Mpa

Color

A1,A2,A3,A3.5 A4,B1,B2,B3
B4,C1,C2,C3,C4,D2,D3,D4
BL1,BL2,BL3,BL4

Restoration indication symptom

Product advantage

STM is 3D multilayer zirconia block for making posterior. Not just preshaded, it shows natural shade transition of 7 Layers in one block from incisal to cervical after sintering. Naturally blending to real teeth.

Technical parameters

Density before sintering	>3.15±0.05 g/cm ³ v
Density after sintering	>6.0 g/cm ³
Linear expansion coefficient	(10.3±0.5)×10 ⁻⁶ K ⁻¹
Three point bending strength	≥800-1250 Mpa
Translucency	≥43%-49%
Chemical solubility after sintering	<100 µg/cm ²
Cytotoxicity test	Cytotoxicity 0 level
Radioactivity after sintering	<0.1 Bq/g
Sintering temperature	1480~1530°C, 1520°C is recommend



Coping		✓
Bridged Coping		✓
3-4 units bridge		✓
5-6 units bridge		✓
Over 7 units bridge		✓
Cantilever bridge		✓
Inlay bridge		✓
Maryland fixed bridge		✓
Telescope crown		✓
Abutment		✓

Zotion zirconia ceramics block--ATM



Translucency

≥55% ⇔ 46%

Three point bending strength

≥600 ⇔ 1100Mpa

Color

A1,A2,A3,A3.5 A4,B1,B2,B3
B4,C1,C2,C3,C4,D2,D3,D4
BL1,BL2,BL3,BL4

Restoration indication symptom

Product advantage

ATM is 3D multilayer zirconia block for making anterior. Not just preshaded, it shows natural shade transition of 7 layers in one block from incisal to cervical after sintering. Naturally blending to real teeth.

Technical parameters

Density before sintering	>3.15±0.05 g/cm ³
Density after sintering	>6.0 g/cm ³
Linear expansion coefficient	(10.3±0.5)×10 ⁻⁶ K ⁻¹
Three point bending strength	≥600-1100 Mpa
Translucency	≥46%-55%
Chemical solubility after sintering	<100 μg/cm ²
Cytotoxicity test	Cytotoxicity 0 level
Radioactivity after sintering	<0.1 Bq/g
Sintering temperature	1480-1530°C, 1520°C is recommend



Coping		✓
Bridged Coping		✓
3-4 units bridge		✓
5-6 units bridge		✓
Over 7 units bridge		X
Cantilever bridge		X
Inlay bridge		X
Maryland fixed bridge		X
Telescope crown		✓
Abutment		✓

16 Colors Dyeing Liquid



16 Color series

Type of color set	Color series	Capacity
A color set	A1 A2 A3 A3.5 A4	60ml
B color set	B1 B2 B3 B4	60ml
C color set	C1 C2 C3 C4	60ml
D color set	D2 D3 D4	60ml

Product advantage

The Zotion specialized dyeing liquid is corresponding to VITA system tooth guide. This products own strong penetrability and dye equably and precisely.

Attention:

The time for soaking should depend on the size of restorations. Churn restoration by glass bar when dyeing to discharge air bubble, so that the color liquid and restorations could completely contact.



Dyeing instruction

applicative material	Zotion AFFINI full-ceramic zirconia
applicative range	Coping、Crown、etc
Usage	Inside dyeing
Dyeing methods	Soaking、Brushing

26 Colors Dyeing Liquid



26 Color series

Type of color set	Color series	Capacity
R color set	2R1.5 2R2.5 3R1.5 3R2.5 4R1.5 4R2.5	60ml
L color set	2L1.5 2L2.5 3L1.5 3L2.5 4L1.5 4L2.5	60ml
M color set	1M1 1M2 2M1 2M2 2M3 3M1 3M2 3M3 4M1 4M2 4M3 5M1 5M2 5M3	60ml

Product advantage

The Zotion specialized dyeing liquid is corresponding to VITA system tooth guide. This products own strong penetrability and dye equably and precisely.

Attention:

The time for soaking should depend on the size of restorations. Churn restoration by glass bar when dyeing to discharge air bubble, so that the color liquid and restorations could completely contact.



Dyeing instruction

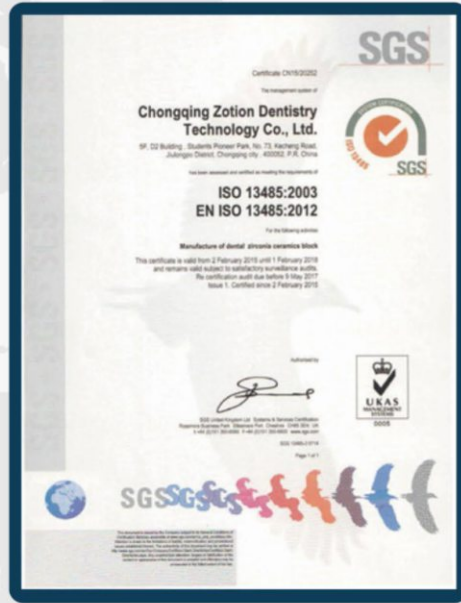
applicative material	Zotion AFFINI full-ceramic zirconia
applicative range	Coping、Crown、etc
Usage	Inside dyeing
Dyeing methods	Soaking、Brushing

Certificates

CE



ISO13485



CFDA

