Philden

Zirconia Block

DENTAL ZIRCONIA CERAMIC

THE FUSION OF AESTHETICS AND SCIENCE

FDA CLEARED

- Digital materials for all indications

Philden Zirconia Block

CATALOGUE

INDICATION GUIDE
Suitable for All Indications

Indications	Veneers	Inlays/onlays	Full contour anterior crown	Anterior bridge (3 units)	Full contour posterior crown	Posterior bridge (3 units)	Full contour bridge (4 units)
ST-ML	×	★	✓	★	★	★	★
3D-Pro	×	★	★	★	★	★	★
4D-ML	×	★	★	★	★	★	★
UT	×	★	✓	×	×	×	×
HT	●	●	●	●	●	●	●
ST	●	●	●	●	✓	✓	✓
ST-C	●	●	●	●	✓	✓	✓

Indications	Full contour bridge (≥4 units)	Anterior coping	Anterior coping bridge (3 units)	Posterior coping	Reduced posterior birdge (3 units)	Reduced posterior birdge (4 units)	Reduced posterior birdge (≥4 units)
ST-ML	✓	×	×	×	×	×	×
3D-Pro	✓	×	×	×	×	×	×
4D-ML	✓	×	×	×	×	×	×
UT	×	×	×	×	×	×	×
HT	●	★	★	★	★	★	★
ST	★	★	★	★	★	★	★
ST-C	★	★	★	★	★	★	★

★ optimum ✓ available ● available but not recommended × unavailable

Replica solution

The true color and texture make the imitation teeth and natural teeth one and seamless. Its high degree of realism makes it difficult to distinguish, natural and beautiful, comfortable and easy to adapt. With all the clarity and strength you need for all indications, there's something for everyone.

ST-ML

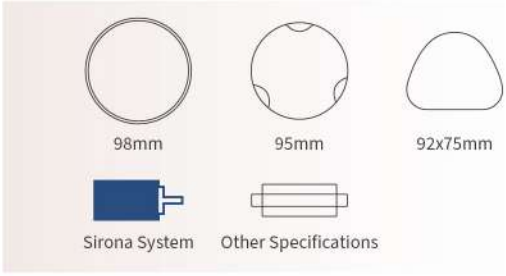
ST-ML Multilayer

Product features

The representative work of gradient colors, the king of cost-effectiveness.

Performance Parameter

Colour	Vita 16&BL1/BL2/BL3/BL4
Translucency	43%
Density	≥6.0g/cm³
Bending Strength	1200mpa
Fracture Toughness	5Mpam½
Hardness (Hv10)	1250



Colour

Indications

3D-PRO

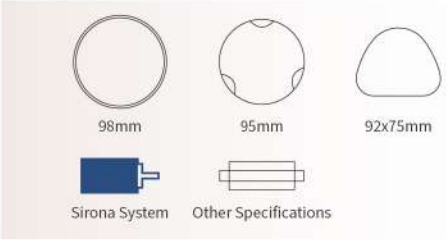
3D Pro Multilayer

Product features

Different parts of natural teeth are composed of different tissues, presenting different aesthetic and physical properties. The 3D Pro zirconia materials are based on the newly developed gradient zirconia materials from IVISTA. They simulate the characteristics of natural teeth in both aesthetic and physical dimensions, boasting natural transition and excellent quality.

Performance Parameter

Colour	White / Vita colors / BL colors
Translucency	43%-49%
Density	≥6.0g/cm³
Bending Strength	650-1200mpa
Fracture Toughness	5Mpam½
Hardness (Hv10)	1250



Y2O3	5.5wt%-9.5wt%
Al2O3	0.05wt%
SiO2	≤0.002wt%
Fe2O3	≤0.002wt%
Aging Properties	Monoclinic Phase < 25%
Chemical Solubility	≤2000hg.cm^{-2}

Translucency span	Bending strength span
49%	≥650MPA
⇅	⇅
43%	≥1200MPA

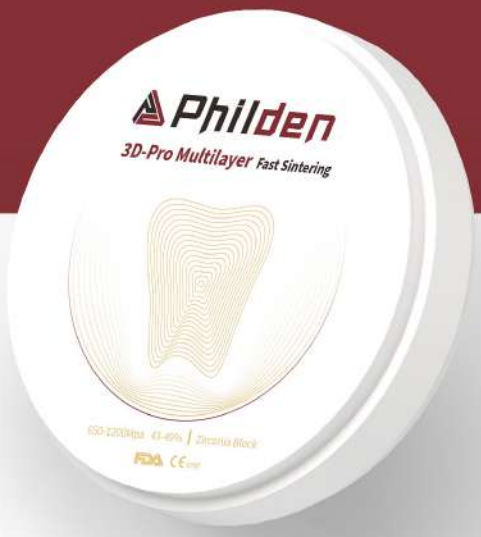
Indications

crown inlay onlay bridge coping

veneer planting full crown planting abutment

3D-Fast

3D Pro Multilayer Fast Sintering

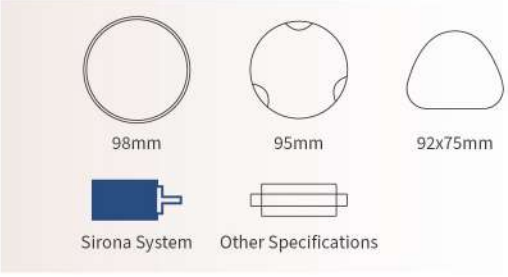


Product features

Its unique powder and production processensures consistent fast and slow combustionperformance at 45 minutes of sintering.

Performance Parameter

Colour	Vita 16&BL1/BL2/BL3/BL4
Translucency	43%
Density	≥6.0g/cm³
Bending Strength	1200mpa
Fracture Toughness	5Mpam½
Hardness (Hv10)	1250



Colour

Indications

bridge

coping

4D-ML

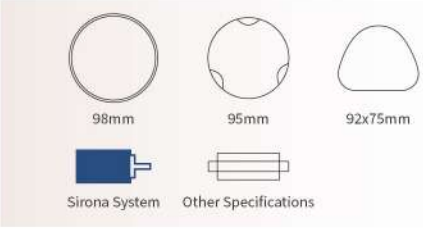
4D-ML Multilayer

Product features

A popular aesthetic restoration material for front teeth, with five layers stacked and nine layers gradually changing. The color transitions naturally without any layers, making it a dental aesthetic restoration material that rivals natural teeth. It is also suitable for rapid sintering technology.

Performance Parameter

Translucency	46%-57%
Density	≥6.0g/cm³
Bending Strength	650-1200mpa
Fracture Toughness	5Mpam½
Hardness (Hv10)	1250



Colour

Indications

3D-pro sintering curve

Less Than 3 Units Bridge (7H)
3D-Pro Sintering Curve

- The heating rate of the first stage：10°C/min
- The heating rate of the second stage：5°C/min
- Maximum temperature range：1500°C is the most suitable sintering temperature
- Maximum heat preservation：2 hours
- Turn on the furnace after the furnace temperature is cooled below 80°C to avoid thermal shock caused by rapid cooling of the material

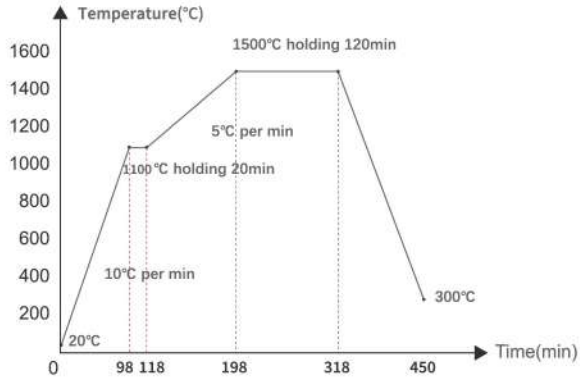


Fig: Bridges below 3 units (recommended sintering curve)

Recommended Sintering Curve for Bridges between 4-6 Units
3D-Pro Sintering Curve

- The heating rate of the first stage：10°C/min
- The heating rate of the second stage：3°C/min
- Maximum temperature range：1500°C is the most suitable sintering temperature
- Maximum heat preservation：2 hours
- Turn on the furnace after the furnace temperature is cooled below 80°C to avoid thermal shock caused by rapid cooling of the material

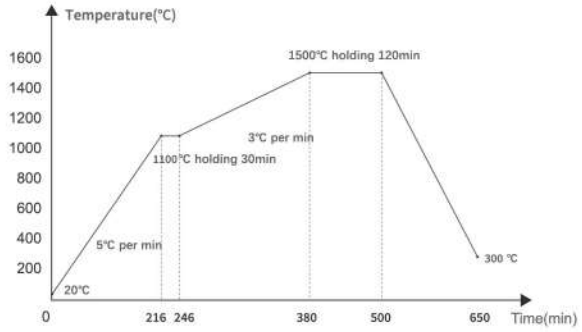


Fig: Recommended Sintering Curve for Bridges between 4-6 Units

More Than 7 Units Of Bridges (15H)
3D-Pro Sintering Curve

- The heating rate of the first stage：5°C/min
- The heating rate of the second stage：2°C/min
- Maximum temperature range：1530°C is the most suitable sintering temperature
- Maximum heat preservation：2 hours
- Turn on the furnace after the furnace temperature is cooled below 80°C to avoid thermal shock caused by rapid cooling of the material

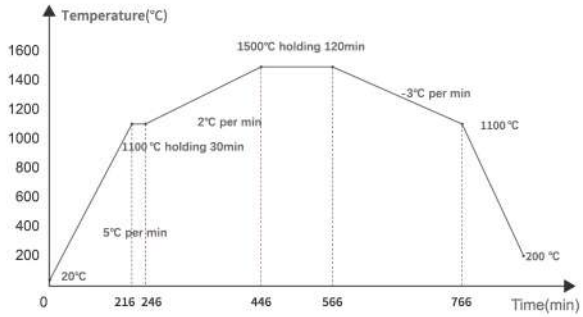


Fig: Bridges with more than 7 units (recommended sintering curve)

Sintering curve

Less Than 3 Units Bridge (7H)
HT,ST,SHT,SHT-ML...Sintering Curve

- The heating rate of the first stage：10°C/min
- The heating rate of the second stage：5°C/min
- Maximum temperature range：1530°C is the most suitable sintering temperature
- Maximum heat preservation：2 hours
- Turn on the furnace after the furnace temperature is cooled below 80°C to avoid thermal shock caused by rapid cooling of the material

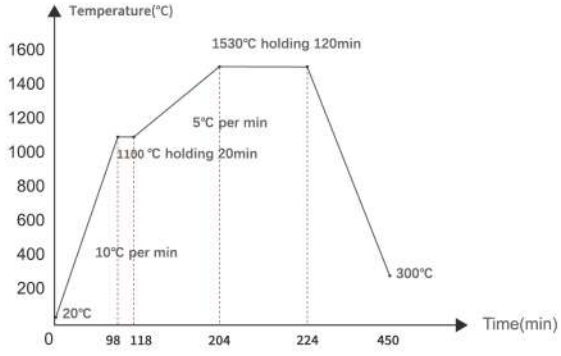


Fig: Bridges below 3 units (recommended sintering curve)

Less Than 4-6 Units Bridge (7H)
HT,ST,SHT,SHT-ML...Sintering Curve

- The heating rate of the first stage：5°C/min
- The heating rate of the second stage：3°C/min
- Maximum temperature range：1530°C is the most suitable sintering temperature
- Maximum heat preservation：2 hours
- Turn on the furnace after the furnace temperature is cooled below 80°C to avoid thermal shock caused by rapid cooling of the material

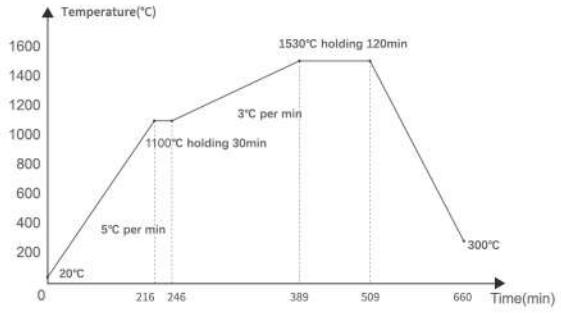


Fig: Bridges below 4-6 units (recommended sintering curve)

More Than 7 Units Of Bridges (15H)
HT,ST,SHT,SHT-ML...Sintering Curve

- The heating rate of the first stage：4°C/min
- The heating rate of the second stage：2°C/min
- Maximum temperature range：1530°C is the most suitable sintering temperature
- Maximum heat preservation：2 hours
- Turn on the furnace after the furnace temperature is cooled below 80°C to avoid thermal shock caused by rapid cooling of the material

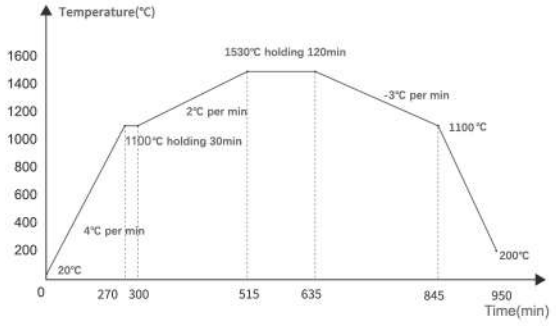


Fig: Bridges with more than 7 units (recommended sintering curve)

Veneer specialty

Lightweight and transparent, it fits the surface of the tooth as if it were natural. Its natural light transmission and perfect fit make the restored teeth trace-free, and the subtle textures are restored, restoring the natural beauty and making the smile more confident and moving.

Veneer series UT

UT Multilayer

Product features

Crystal clear, with a jade like appearance, it can be personalized for internal dyeing according to the situation.

Performance Parameter

Colour	White
Translucency	49%
Density	≥6.0g/cm³
Bending Strength	650mpa
Fracture Toughness	5Mpam½
Hardness (Hv10)	1250

Indications

crown

bridge

Mono seris

Fully digital production, precise repair, material upgrade, more transparent, perfect as ever, high strength, good toughness, excellent corrosion resistance and long-term stability, safe and reliable.

HT

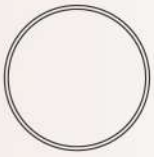
High Transparency

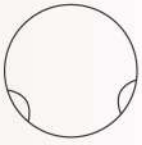
Product features

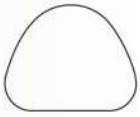
With super high flexural strength and hardness, this material has comprehensive indications, especially for long span bridges.
The excellent masking effect makes it an ideal choice for covering metal color.

Performance Parameter

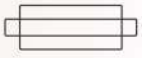
Colour	A1
Translucency	41%
Density	≥6.0g/cm³
Bending Strength	1300mpa
Fracture Toughness	5Mpam½
Hardness (Hv10)	1250


98mm


95mm


92x75mm


Sirona System


Other Specifications

ST

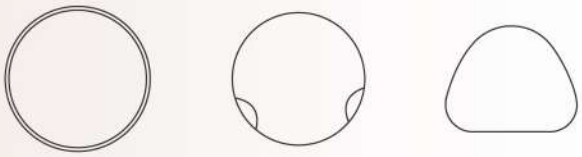
Super Transparency

Product features

The special raw material processing and manufacturing technique have brought this material brilliant translucency and flexural strength. The stable inner structure ensures accurate post-milling sealing even at high machining speed.

Performance Parameter

Colour	A1
Translucency	43%
Density	≥6.0g/cm³
Bending Strength	1200mpa
Fracture Toughness	5Mpam½
Hardness (Hv10)	1250



98mm | 95mm | 92x75mm

Sirona System | Other Specifications

ST-C

ST-Color single layer

Product features

Pre dyed products with high strength and no need for dyeing; Both anti-aging and strength performance indicators.

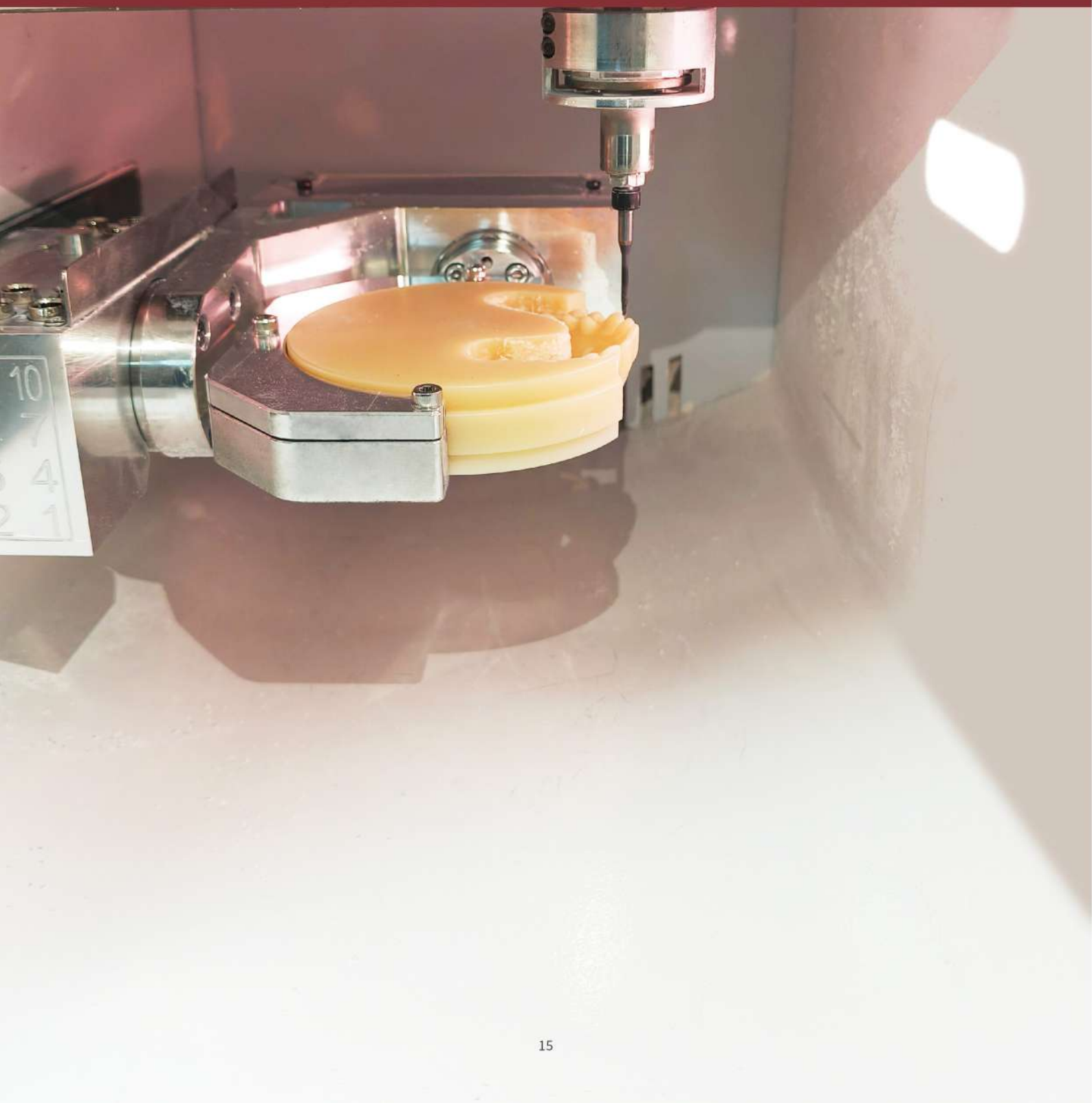
Performance Parameter

Colour	Vita 16&BL1/BL2/BL3/BL4
Translucency	43%
Density	≥6.0g/cm³
Bending Strength	1200mpa
Fracture Toughness	5Mpam½
Hardness (Hv10)	1250

Colour

Indications

Dental consumables



Millable Dental PMMA Discs

Product features

PMMA discs are 100% high quality resin material for making of crown and bridges which serve as temporary restorations, modules or night-guard.

Performance Parameter

Type	Flexible PMMA,Multilayer PMMA,normal PMMA
Colour	Vita 16 color, BL1-BL4,clear,pink
Hardness	75-85° Shore
Melting point	240-270°C
Density	1:19
Ash	0.032%
Shrinkage	0.5%
Application	Dental CAD / CAM systems for resin plate, wax mold crown bridge denture prosthesis, temporary crown, night-guard etc.

Milling System	Dimension	Type	Color
Open CADCAM milling system	OD98*10-30mm	flexible PMMA, Multilayer PMMA, normal PMMA	Vita 16 color, BL1-BL4, clear, pink
Amann Girrbach CADCAM milling system	89*71*12mm-25mm	flexible PMMA, Multilayer PMMA, normal PMMA	Vita 16 color, BL1-BL4, clear, pink
Zirkonzahn CADCAM milling system	OD95*10mm-25mm	flexible PMMA, Multilayer PMMA, normal PMMA	Vita 16 color, BL1-BL4, clear, pink

Digital materials for all indications

The fusion of aesthetics and science

Philden

ZIRCONIA CERAMIC BLOCKS FOR ALL CERAMIC DENTURES

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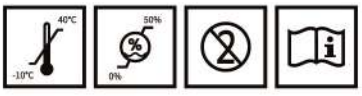

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