## Common Issues and Troubleshooting

# Chipping or Edge Damage During the Milling Process

Cause A: Insufficient equipment cooling or excessive cutting speed.

Solution A: Verify proper positioning of coolant or spray nozzles and reduce cutting speed.

Cause B: Bur overuse or severe coating wear.

Solution B: Replace glass-ceramic burs after 20–25 uses; discard if worn.

### Fracture or Chipping During Clinical Try-in

Cause A: Improper tooth preparation (sharp edges or excessive undercuts).

Solution A: Modify the design to eliminate stress concentration points. Use smooth, rounded margins to reduce the risk of cracks.

Cause B: Insufficient crown thickness.

Solution B: Use chamfer or rounded shoulder margin design with adequate material thickness. For optimal results, the minimum thickness should be 0.3–0.4 mm for glass-ceramic veneers (labial side) and 0.5–0.8 mm for full crowns.

# Color Mismatch After Sintering

Cause A: Incorrect glass-ceramic shade selection.
Solution A: Test the shade on sample pieces before sintering.

Cause B: Deviations from recommended sintering protocol causing post-crystallization color shifts Solution B: Follow Besmile's recommended sintering curves or adjust the final shade using staining paste

Cause C: Incorrect sintering temperature (too low/high). Low temperatures may cause overly light shades, while excessive heat may lead to rounded edges from partial melting.

Solution C: Optimize temperature to avoid color shifts or edge melting.

### Threading Marks or Other Machining Defects

Cause: Improper cutting parameters or poor device calibration.

Solution: Select appropriate milling parameters (speed, feed rate, etc.) according to the guidelines and perform regular milling machine calibration.



#### **About Besmile**

Besmile is a global digital solutions provider for restorative and implant dentistry.

We offer integrated systems—premium CAD/CAM materials, advanced equipment, and precision implant systems—designed to streamline workflows and ensure reliable results.

All core products are developed and manufactured in-house, ensuring consistent quality and continuous innovation.

Trusted by over 1,000 partners in more than 100 countries, we empower dental professionals to create confident, lasting smiles.

# Technology creates the best smile.



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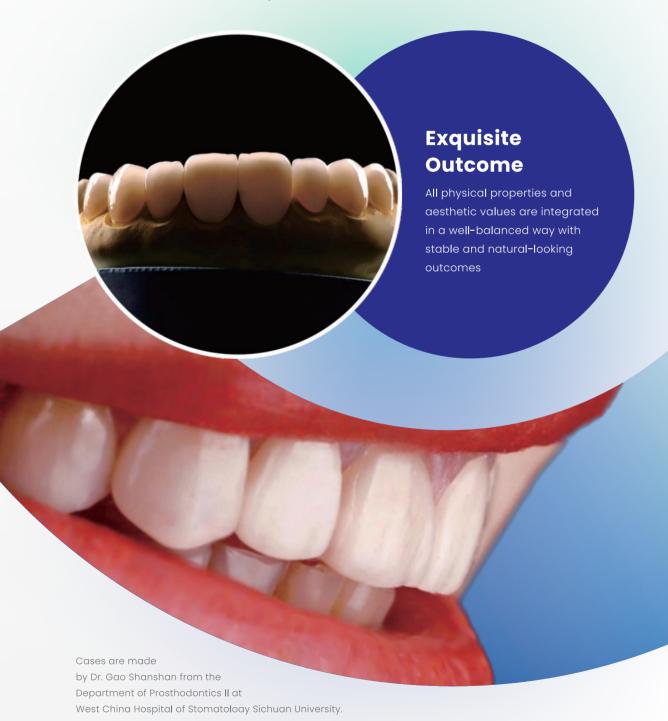


VI.I

# Glazic Lifelike Aesthetics with Superior Strength

#### Your ideal all-ceramic material for gesthetic restorations

Glazic is zirconia-reinforced lithium disilicate glass ceramic made of nano high-quality raw materials, obtaining a fine-grained microstructure with outstanding machinablity and stable aesthetic results. With its excellent mechanical strength, desired shade and natural fluorescence opalescence, simple processing and minimally invasive features, this block will be your ideal all-ceramic material for chairside aesthetic restorations.



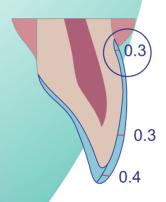
### ■ Lifelike Aesthetics



#### Reproducing the aesthetic effect of natural teeth

- Outstanding translucency from proper light scattering
- Lifelike opalescence with natural fluorescence
- Personalized aesthetics with varied shades available

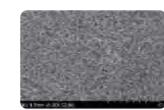
### Super Minimally Invasive



#### Well keeping the natural teeth structure

- Ultra-thin veneer to 0.3mm
- Maximum preservation of natural tooth structure
- Long-term management to maintain endodontic health

## ■ Simple Processing

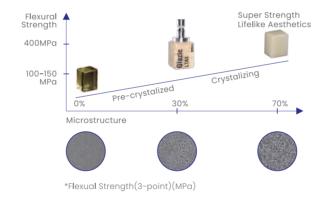




#### Achieving efficient and reliable restorations

- Ideal material for CAD/CAM processing with super
- Lower chipping occurrence with high edge stability
- Proper hardness and flexural strength(uncrystallized)guarantee milling burs long lifespan

# Super Strength



#### Contributing to the long-time safety of restorations

- Ultra fine-grained microstructure with completely dissolved zirconia in glass
- Flexural Strength (3-point) ≥ 400 MPa (up to 3-unit anterior bridge)

#### Indications















#### Inlays/Onlays Reduced crowns

Partial crowns Full contour crowns Full contour crowns Full contour bridges (anterior)

### ■ Translucency Level

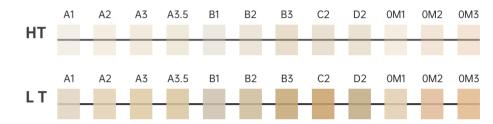


Ideal for precise repair of small defects (inlays, onlays and for restorations on normal-colored abutments, etc.), thanks to its lifelike translucency, opalescence and



Especially suitable for bigger esthetic crown restorations (partial crowns, full-contour crowns, reduced crowns, etc.), thanks to its excellent masking and complementing ability with brilliant shades and translucency.

#### Available Shades



# Specification

Glazic	Dimensions(mm)	Pcs/Pack
Glazic LTA3 BSM Glazic LTA3 BSM	40*15*14	– 5 Pcs
	18.5*14.9*12.5	

### Material Properties

Composition	SiO <sub>2</sub> , Al <sub>2</sub> O <sub>3</sub> , Li <sub>2</sub> O, K <sub>2</sub> O, Na <sub>2</sub> O, ZrO <sub>2</sub> , other oxides etc.	
Density(g/cm³)	≥2.2	
Vickers hardness(HV10)	480-520(Crystallized)	
Flexual strength(3-point)[MPa]	≥400	
Fracture toughness(MPam½)	>2.5	
Chemical solubility(µg/cm²)	<100	
CTE(500°C)[10-6K]	9.7±0.5	
Crystallization Temp.[°C]	840	