

## 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.



**Chengdu Besmile Medical Technology Co.,Ltd.,**

www.bsmdental.com

T: +86-28-85317108

E: info@cdbesmile.com

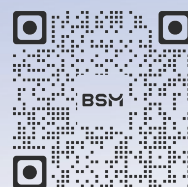
**Besmile Dental America Inc.**

20311 Valley Blvd, Suite I, Walnut, CA 91789

T: (626)921-5798

E: sales@bsmdentalus.com

Contact Us



# 3D Aconia® Ultra

Aesthetics,  
Stronger than Ever



# 3D Aconia<sup>®</sup> Ultra

Aesthetics , Stronger than Ever

3D Aconia Ultra unites exceptional **aesthetics** and durable **performance** in one premium material.

Its **ultra-translucent** multilayer design delivers lifelike gradients, reliable strength, and predicatable results —a standout choice for consistently beautiful restorations.



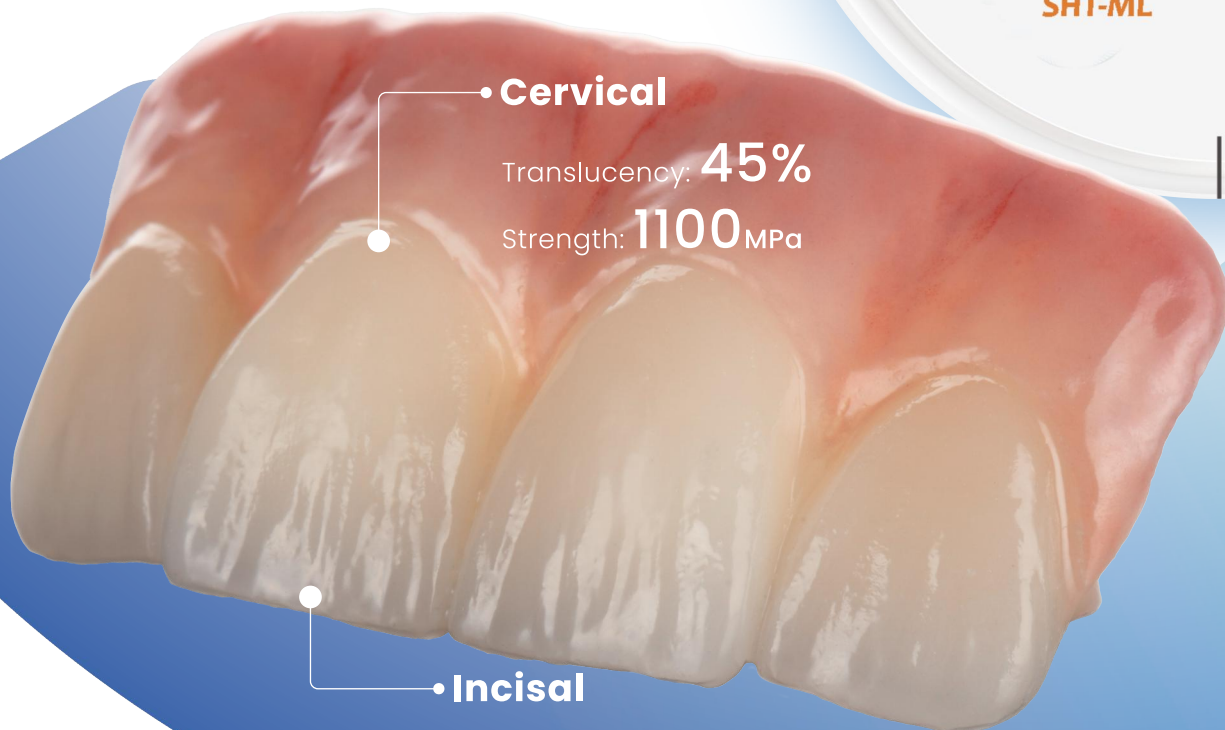
Aesthetics



Strength



Durability



• **Cervical**  
Translucency: **45%**  
Strength: **1100 MPa**

• **Incisal**  
Translucency: **55%**  
Strength: **700 MPa**

## Superior Translucency

Ultra-high translucency and seamless gradient deliver realistic dimension and lifelike restorations.

## Flexible Sintering, Consistent Results

Within a flexible 1520°C–1560°C sintering range, providing stable, predictable shade and translucency every time.



## Glaze n' Go!

No stain needed, provides accurate shading and seamless 3D effect, delivers ideal, ready-to-go restorations immediately.



## No More Rework

Low deformation and high fracture toughness ( $\geq 5 \text{ MPa}\cdot\text{m}^{1/2}$ ) ensure accurate, durable bridges with fewer fractures and far less rework.



# 3D Multilayer Technology



10 yrs  
of R&D

10,000+  
Tests

U.S.  
Patented

## Challenges You Often Face

- Too many SKUs. Too much inventory.
- Visible shade steps. Uneven layering.
- Deformation. Unstable results.



## How 3D Aconia Ultra Helps

- One material. Many indications.
- A seamless gradient. Peak aesthetics.
- Near-zero deformation. Consistent performance.

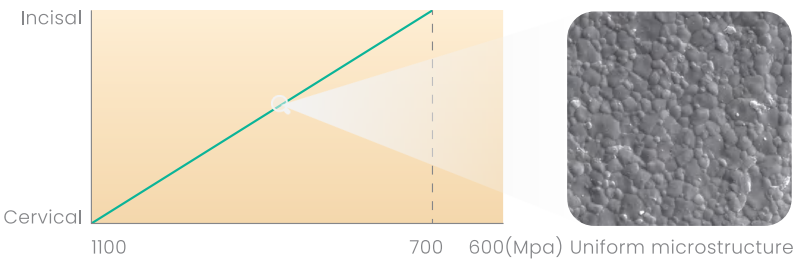
## How it works

### Interleaved Layer Structure

#### 3D Aconia Ultra Multilayer



✓ Seamless gradient

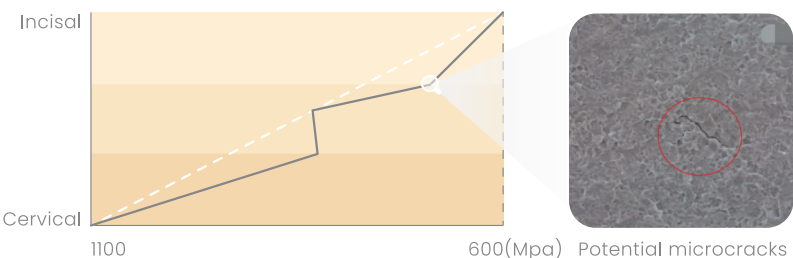


✓ Uniform strength distribution

#### Conventional Structure



✗ Uneven color transition

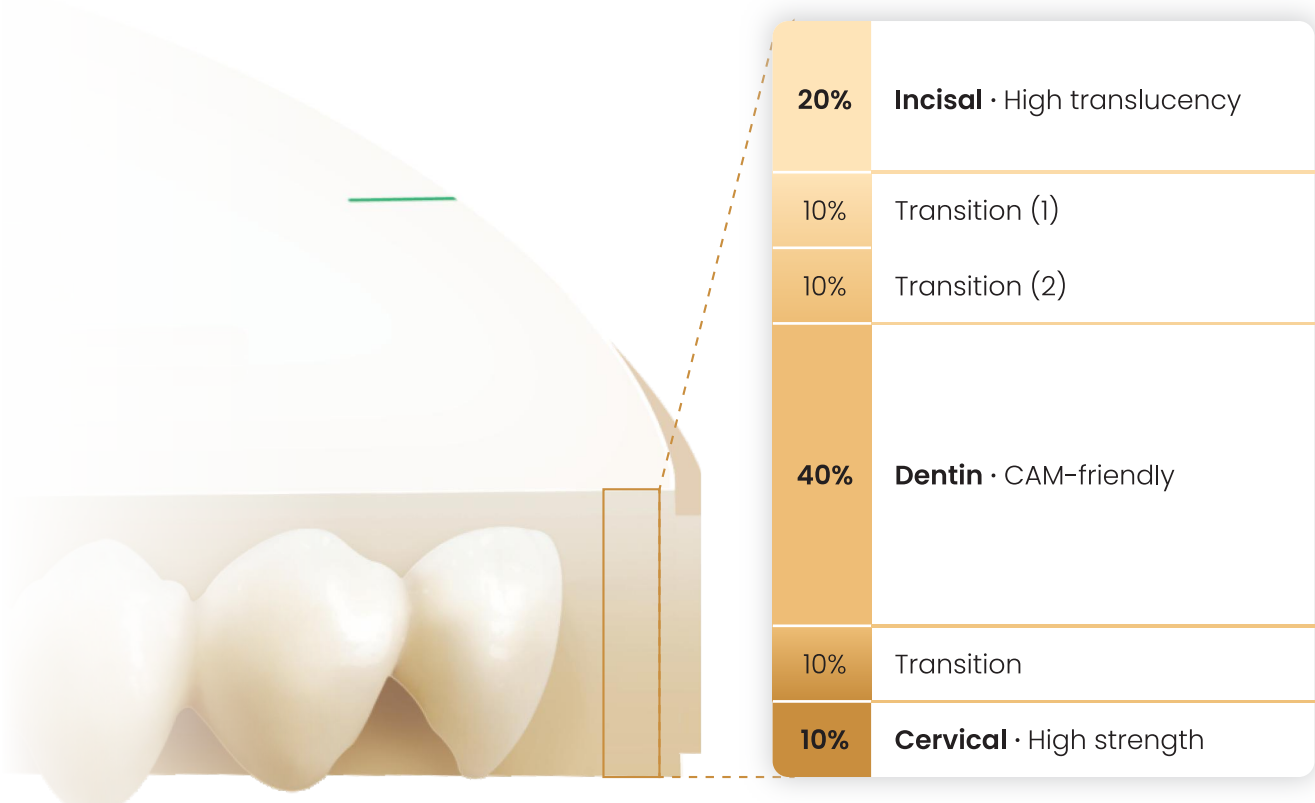


✗ Strength decreases at the interlayer zone

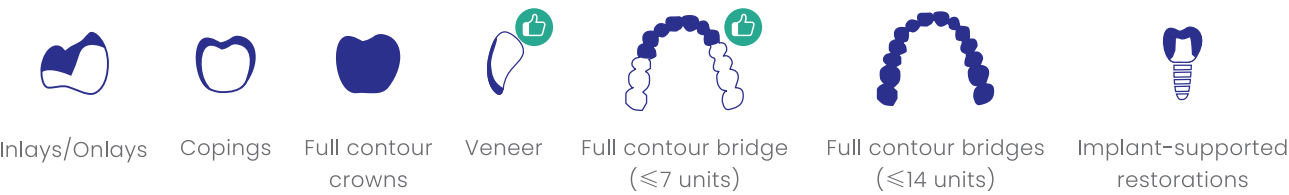
Our patented interleaved technology upgrades conventional multilayer zirconia, significantly enhancing interlayer bonding and shear resistance.

Optimized powder formulations and precise blending ratios deliver higher strength, better translucency, and more uniform shrinkage.

## Look into Details



## Indications

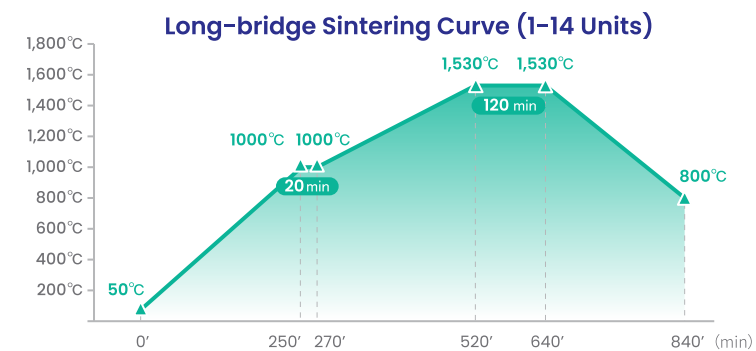


## Technical Parameters

|                             |                                                                                 |
|-----------------------------|---------------------------------------------------------------------------------|
| Flexural strength (3-point) | 700-1100Mpa                                                                     |
| Translucency                | 45%-55%                                                                         |
| Shade                       | A1, A2, A3, A3.5, A4, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4, 0M1, 0M2, 0M3 |
| Disc thickness (φ98mm)      | 12/14/16/18/20/22/25/28*/30*                                                    |
| Sintered density            | > 6.02                                                                          |
| Vickers-hardness HV10       | 1300±50                                                                         |
| Fracture toughness          | >5                                                                              |

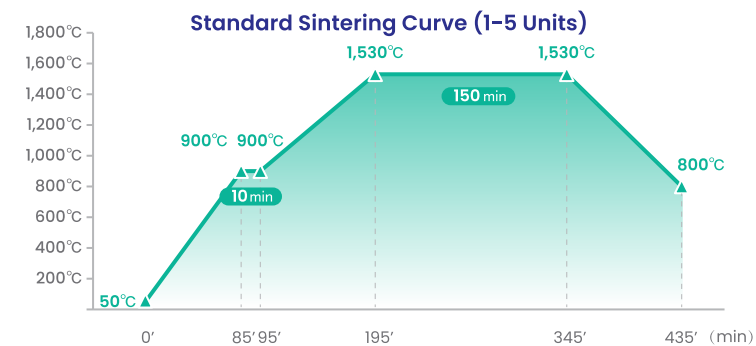
\*Customized production required. Please consult your local sales representative for details.

# Sintering Curve



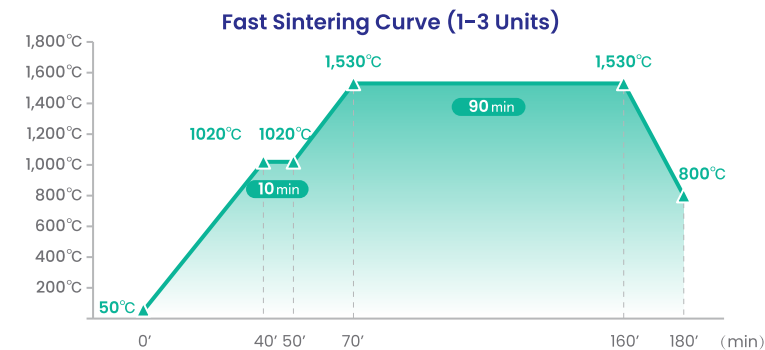
Long-Bridge Sintering Parameters (1-14 Units)

| Step | Initial temperature(°C) | Final temperature(°C) | Time(min) | Heating rate(°C/min) |
|------|-------------------------|-----------------------|-----------|----------------------|
| 1    | 50                      | 1000                  | 250       | 4                    |
| 2    | 1000                    | 1000                  | 20        | Holding              |
| 3    | 1000                    | 1530                  | 250       | 2                    |
| 4    | 1530                    | 1530                  | 120       | Holding              |
| 5    | 1530                    | 800                   | 200       | -4                   |
| 6    | 800                     | Natural cooling       |           |                      |



Standard Sintering Parameters (1-5 Units)

| Step | Initial temperature(°C) | Final temperature(°C) | Time(min) | Heating rate(°C/min) |
|------|-------------------------|-----------------------|-----------|----------------------|
| 1    | 50                      | 900                   | 85        | 10                   |
| 2    | 900                     | 900                   | 10        | Holding              |
| 3    | 900                     | 1530                  | 100       | 6                    |
| 4    | 1530                    | 1530                  | 150       | Holding              |
| 5    | 1530                    | 800                   | 90        | -8                   |
| 6    | 800                     | Natural cooling       |           |                      |



Fast Sintering Parameters (1-3 Units)

| Step | Initial temperature(°C) | Final temperature(°C) | Time(min) | Heating rate(°C/min) |
|------|-------------------------|-----------------------|-----------|----------------------|
| 1    | 50                      | 1020                  | 40        | 24                   |
| 2    | 1020                    | 1020                  | 10        | Holding              |
| 3    | 1020                    | 1530                  | 20        | 25                   |
| 4    | 1530                    | 1530                  | 90        | Holding              |
| 5    | 1530                    | 800                   | 20        | -36                  |
| 6    | 800                     | Natural cooling       |           |                      |

# Digital Workflow

## Unparalleled Efficiency,Unimaginable Ease

### Scanning

The BSM intraoral scanner M5 pro collects visualized and simultaneous information from the patients within 10 minutes.

### Designing

The Smile Cloud design platform (<https://www.bsmsmilecloud.com/>) will provide the design service you need with fascinating design results.

### Selecting Materials

3D Aconia Ultra delivers superior performance with excellence in aesthetics and function.

### Milling

The BSM-500D is a 5-axis dry milling machine that produces high-precision zirconia restorations with 5µm milling accuracy.

### Sintering

The BSM-FC40 zirconia sintering furnace offers fast sintering with a capacity of up to 80 crowns sintered at once.

### Finishing

Artamic Stain/Glaze offers a wide range of shades for customization and characterization, delivering aesthetics and quality in restorations.



\*Best results are achieved when used with the BSM FM30 furnace in Standard Mode.