

## 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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# 3D Ultra

Aesthetics,  
Stronger  
than Ever



# Aconia® 3D Ultra

Aesthetics, Stronger than Ever

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

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



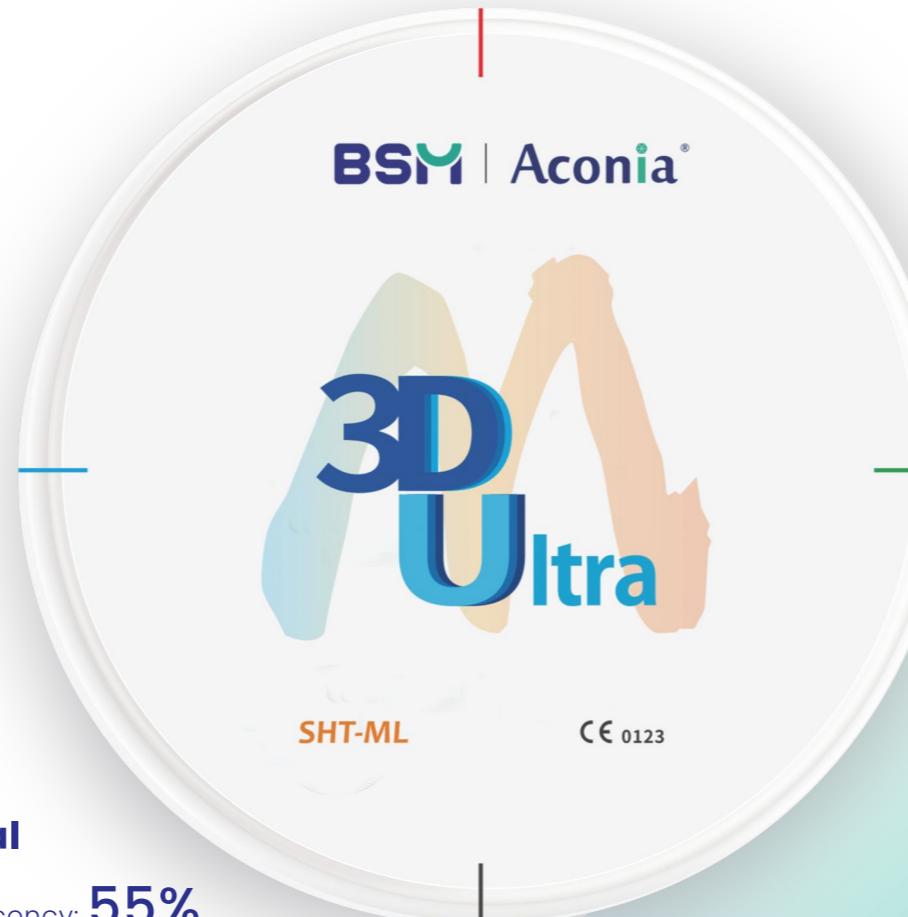
Aesthetics



Strength



Durability



## • Incisal

Translucency: 55%

Strength: 700 MPa

## • Cervical

Translucency: 45%

Strength: 1100 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

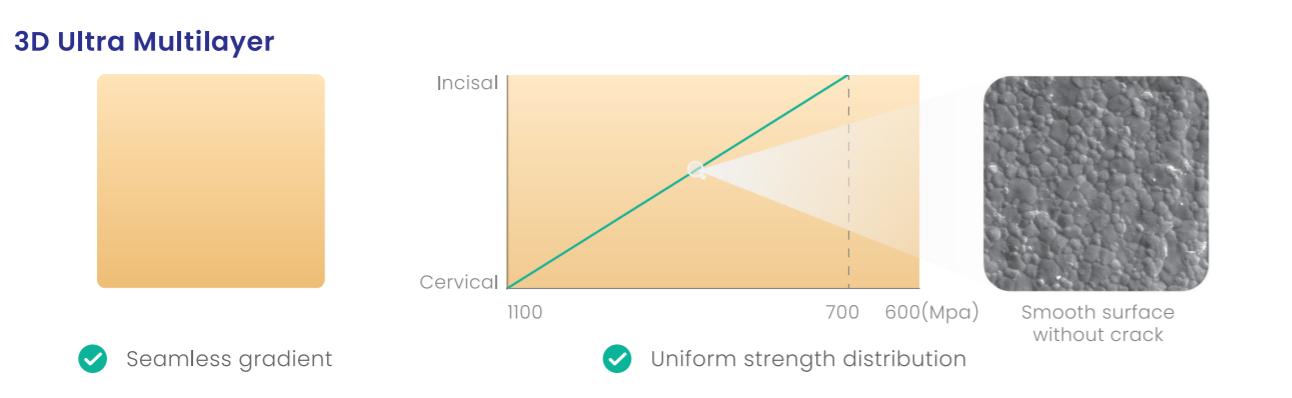
- Too many SKUs. Too much inventory.
- Visible shade steps. Uneven layering.
- Deformation. Unstable results.

## How 3D Ultra Helps

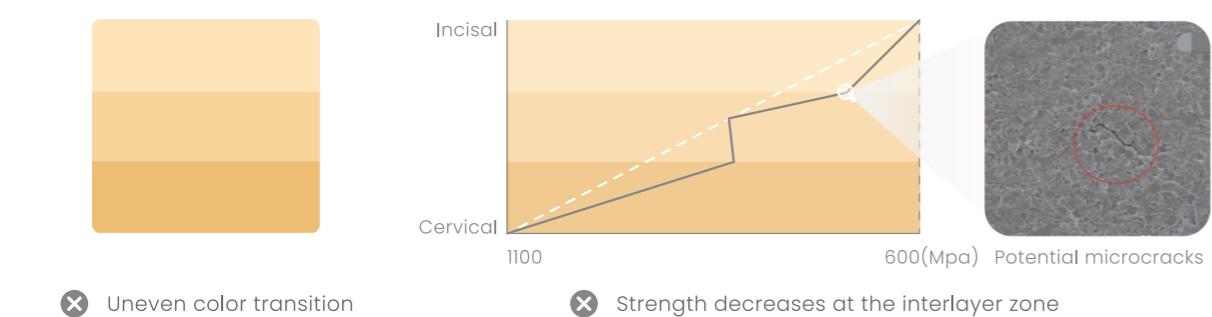
- One material. Many indications.
- A seamless gradient. Peak aesthetics.
- Near-zero deformation. Consistent performance.

## How it works

### Interleaved Layer Structure



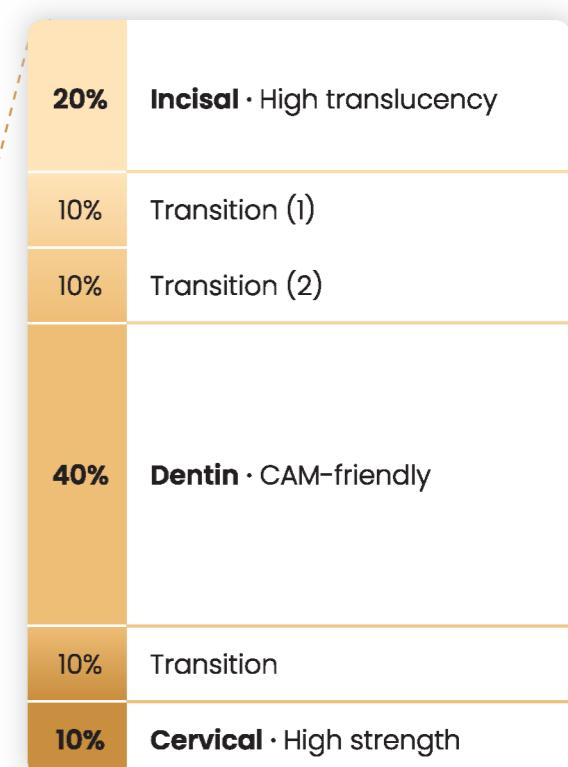
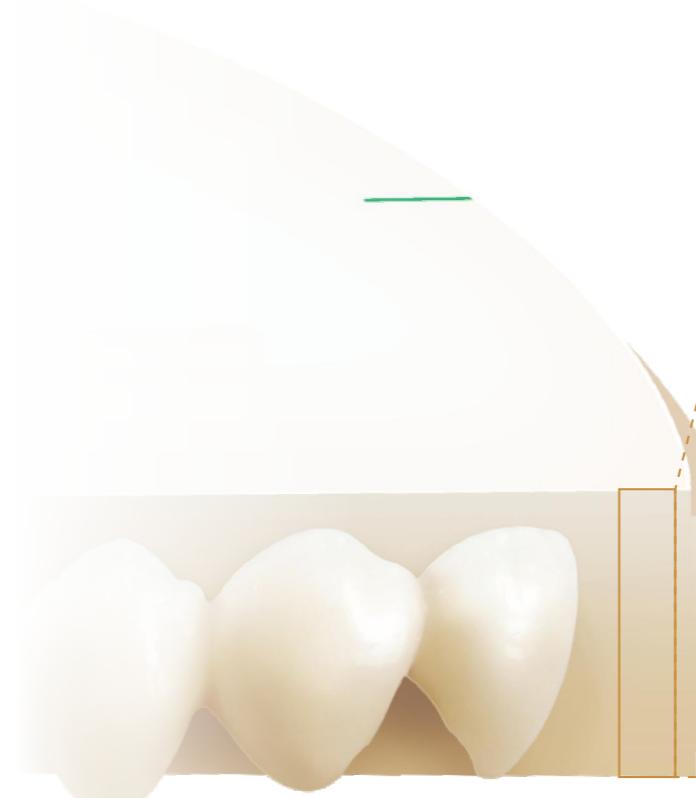
### Conventional Structure



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



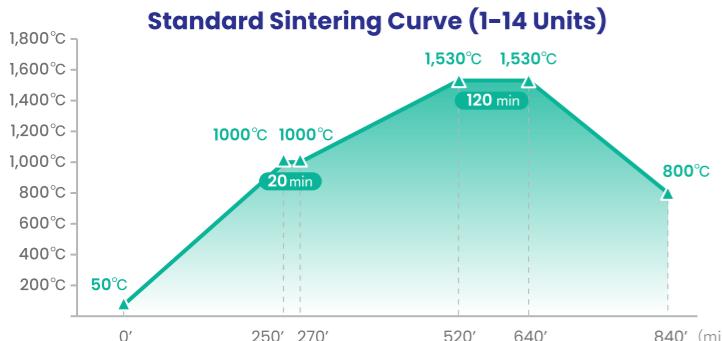
Inlays/Onlays Copings Full contour crowns Veneer Full contour bridge ( $\leq 7$  units) Full contour bridges ( $\leq 14$  units) Implant-supported restorations

## 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, OM1, OM2, OM3
Disc thickness ( $\phi 98.5\text{mm}$ )	12/14/16/18/20/22/25/28*/30*
Sintered density	>6.02
Vickers-hardness HV10	1300 $\pm$ 50
Fracture toughness	>5

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

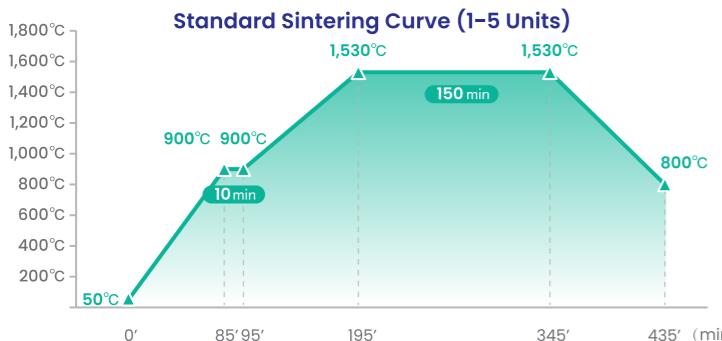
## Sintering Curve



### Standard 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

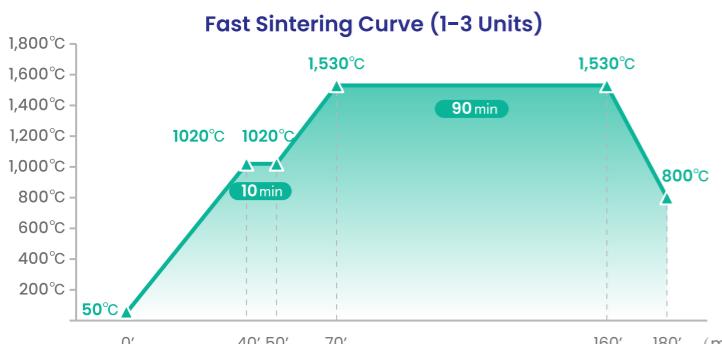
\*It's recommended to use BSM sintering furnaces in Standard mode.



### 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

\*It's recommended to use BSM sintering furnaces in Standard mode.



### 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

\*It's recommended to use BSM sintering furnaces in Standard mode.

## Digital Workflow

### Unparalleled Efficiency, Unimaginable Ease

#### Scanning

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

1



#### Designing

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

2



#### Selecting Materials

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

3



#### Milling

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

4



#### Sintering

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

5



#### Finishing

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

6

