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

@Besmile @besmile_aconia



3D Aconia® Master Plus

Mastering Aesthetics and Function in Perfect Balance

2H Fast Sintering



Why Choose **3D Aconia Master Plus**

3D Aconia Master Plus, the next generation of Aconia 3D Multilayer, redefines multilayer zirconia with superior performance in aesthetics, function, and stability. It is ideal for the efficient fabrication of monolithic aesthetic crowns to wide-span bridges, including implant-supported long bridges.

Mastering Aesthetics and Function in Perfect Balance



Durability Redefined:
With flexural strength of 800 - 1200 MPa and fracture toughness ≥ 6.5 MPa·m$^{1/2}$, 3D Aconia Master Plus ensures reliability for high-load restorations, minimizing fractures and rework.

Lifelike Aesthetics:
A seamless gradient in translucency (52%-45%) replicates the natural beauty of teeth.



Peace of Mind



Low deformation and high fracture toughness (≥ 6.5 MPa·m$^{1/2}$) ensure accurate, durable bridges—minimizing fractures and reducing case rework.

Consistent Aesthetic Results



A flexible sintering range of 1520°C to 1570°C gives you the freedom to achieve stable and reliable outcomes every time.

Efficient Sintering

It achieves high-speed sintering with the BSM-FC30 and its specific sintering curve—enhancing efficiency and reducing delivery time.

Glaze & Go

No staining needed—accurate shading and a seamless 3D effect guarantee natural-looking restorations.

Perfectly Matched Masking Solution

Pair with Aconia V1 Opaque Liquid for customized shading solutions that seamlessly mask implant abutments while delivering natural aesthetics.

3D Multilayer Technology

U.S. PATENT PATENTED 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.

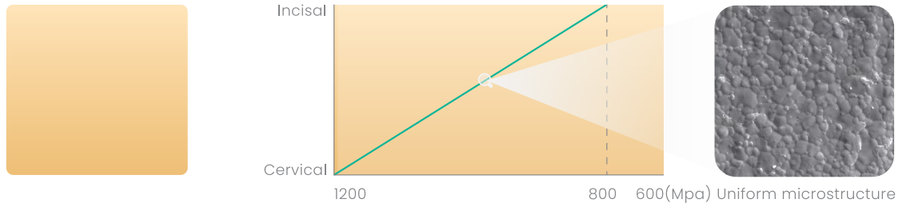
How 3D Aconia Master Plus Helps

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

How it works

Interleaved Layer Structure

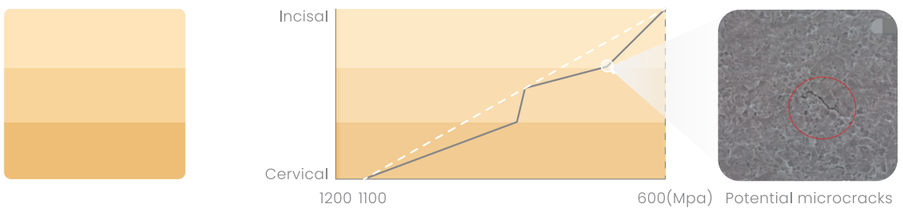
3D Aconia Master Multilayer



Seamless gradient

Uniform strength distribution

Conventional Structure



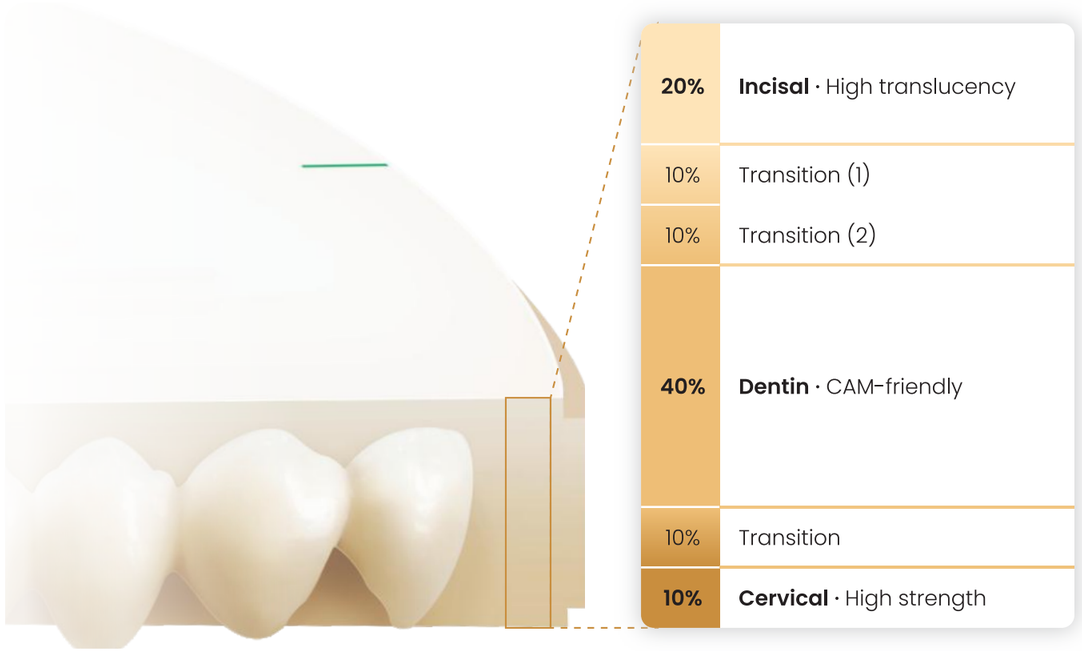
Uneven color transition

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



Inlays/Onlays | Copings | Full contour crowns | Veneer | Full contour bridges (≤14 units) | Implant-supported restorations

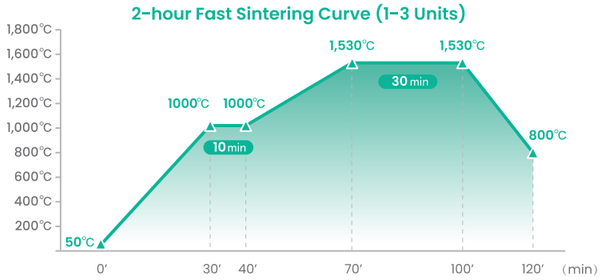
Technical Parameters

System	98mm
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*
Flexural strength(3-point)	800-1200MPa
Translucency	45-52%
Vickers-hardness HV10	1250-1350
Sintered density	>6.02 (g/cm^3)
Fracture toughness	⩾6.5 ($MPa.m^{1/2}$)

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

Sintering Curve

2-hour Fast Sintering Curve (1-3 Units)

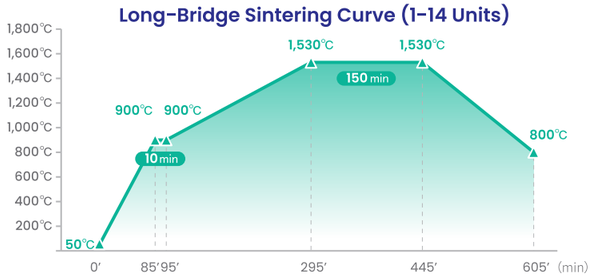


2-hour Fast Sintering Parameters (1-3 Units)

Step	Initial temperature(℃)	Final temperature(℃)	Time(min)	Heating rate(℃/min)
1	50	1000	30	32
2	1000	1000	10	Holding
3	1000	1530	30	18
4	1530	1530	30	Holding
5	1530	800	20	-36
6	800	Natural cooling		

*The 2-hour fast sintering program is specifically designed for BSM FC series fast-sintering furnace，or other furnaces with fast-sintering furnace. Actual sintering time may vary depending on each furnace.

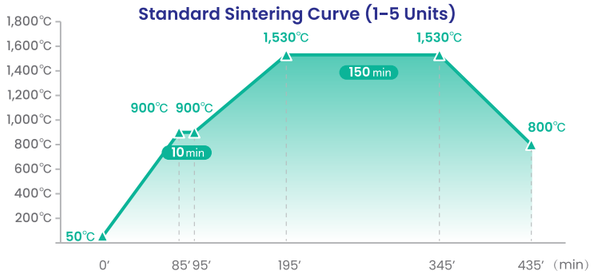
Long-Bridge Sintering Curve (1-14 Units)



Long-Bridge Sintering Parameters(1-14 Units)

Step	Initial temperature(℃)	Final temperature(℃)	Time(min)	Heating rate(℃/min)
1	50	900	85	10
2	900	900	10	Holding
3	900	1530	200	3
4	1530	1530	150	Holding
5	1530	800	160	-5
6	800	Natural cooling		

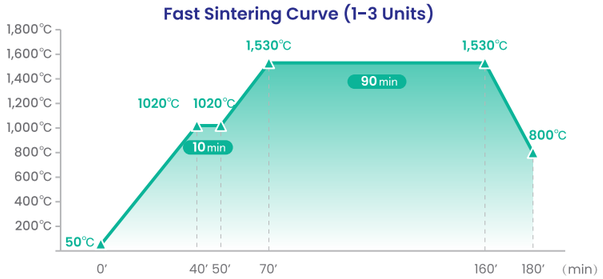
Standard Sintering Curve (1-5 Units)



Standard Sintering Parameters (1-5 Units)

Step	Initial temperature(℃)	Final temperature(℃)	Time(min)	Heating rate(℃/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 Curve (1-3 Units)



Fast Sintering Parameters (1-3 Units)

Step	Initial temperature(℃)	Final temperature(℃)	Time(min)	Heating rate(℃/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 Master Plus 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.

