PRODUCT CATALOG

Technology Creates the Best Smile

BSM 贝施美® BESMILE

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BSM 贝施美® BESMILE

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BSM 贝施美 BESMILE

Aconia® Zirconia

Aconia® Zirconia

	49% TOP TRANSLUCENCY	46% SUPER HIGH TRANSLUCENCY	43% SUPER TRANSLUCENCY	42% HIGH TRANSLUCENCY
Aconia®	TT	SHT	ST	HT+
3D Multilayer	600-900 MPa	900-1100 MPa	1000-1200 MPa	
Preshade		1100 MPa	1250 MPa	
White	800 MPa	1100 MPa	1250 MPa	1400 MPa

EFFICIENCY

STRENGTH

INDICATION

		Veneer	Inlay & Onlay	Reduced crown	Full contour crown	Coping	Full contour anterior bridge (3unit)	Full contour posterior bridge (3unit)	Full contour bridge (≤7unit)	Full contour bridge (≤14unit)	Abutment
	TT (3D Multilayer & White)										
HOT	**SHT-ML All in One** (3D Multilayer)										
	SHT (Preshade & White)										
UPGRADED	**ST** (Preshade & White & 3D Multilayer)										
	HT+ (White)										

TT-ML

Create the best smile with highest esthetics

-Most natural appearance

-Perfect option for anterior esthetic restoration

-Fast and easy processing

-Creatively maximized efficiency and esthetics

14mm-25mm

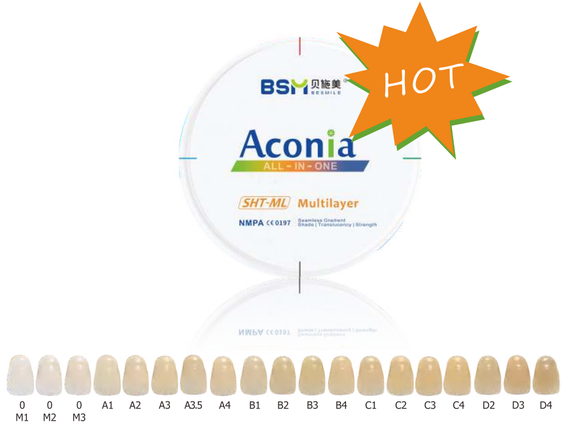
Indication					
Veneer	Inlay & Onlay	Reduced crown	Full contour crown	Coping	Full contour anterior bridge (3 unit)

-Seamless transition, smooth gradient

-Extremely high incisal translucency provides lifelike replication of tooth enamel

-Bionic tooth-growing effect created by Aconia Vitalization Technology

Technical data	
Flexural strength(3-point)	600-900 Mpa
Translucency	46-49%
Vickers-hardness HV10	1300±50
Density	>3 (g/cm^3)
Sintered density	>6.02 (g/cm^3)
Chemical solubility	<50($\mu g/cm^3$)
Radioactivity	<0.1/$Bq.g^{-1}$
Fracture toughness	>3/($Mpa.m^{1/2}$)
CTE	(10.5±0.5)*$10^{-6}K^{-1}$



SHT-ML

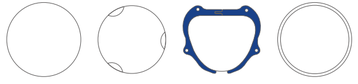
Create the best smile with highest flexibility

-All-in-one & One-for-all

-Seamless gradient in translucency, strength and shade

-Fast and easy processing

-Revolutionarily well-balanced combination of strength and translucency



14mm-25mm

Indication							
							
Inlay & Onlay	Reduced crown	Full contour crown	Coping	Full contour anterior bridge (3 unit)	Full contour posterior bridge (3 unit)	Full contour bridge (≤7 unit)	Full contour bridge (≤14 unit)

ALL IN ONE

All in One

All technologies integrated to one Aconia masterpieces made in one Multilayer indications applied by one SHT-ML

One for All

One SHT-ML to fulfill all your needs
Multilayer to replace all your inventories
Aconia creates all your smiles

Technical data	
Flexural strength(3-point)	900-1100 Mpa
Translucency	43-46%
Vickers-hardness HV10	1300±50
Density	>3 (g/cm^3)
Sintered density	>6.02 (g/cm^3)
Chemical solubility	<50($\mu g/cm^3$)
Radioactivity	<0.1/$Bq.g^{-1}$
Fracture toughness	>5/($Mpa.m^{1/2}$)
CTE	(10.5±0.5)*$10^{-6}K^{-1}$

ST-ML

Perfectly Integrating Strength and Aesthetics

-Perfect integration: strength+aesthetics

-3D seamless gradient: Shade+Strength+Translucency

-Efficient processing without coloring procedure needed

14/18/22mm

Indication						
Inlay & Onlay	Full contour crown	Coping	Full contour anterior bridge (3 unit)	Full contour posterior bridge (3 unit)	Full contour bridge (≤ 7unit)	Full contour bridge (≤14unit)

1.Perfect integration: strength+aesthetics

-Stronger strength up to 1200Mpa, while translucency up to 45%

-Ideal for up to full-arch aesthetic restorations

2.3D seamless gradient: Shade+Strength+Translucency

-Natural shade transition, no transition layers

-Gradient strength&translucency, reproducing te natural teeth

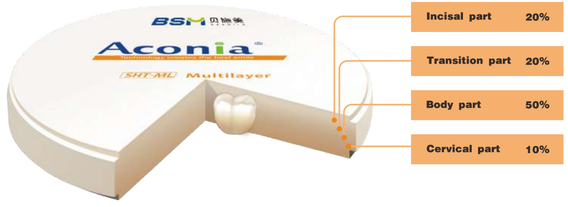
-Highly consistent shrinkage, ensuring the coherent final results

3. Efficient processing without coloring procedure needed

-No coloring needed, making the processing easy&efficient

Technical data	
Flexural strength	1000-1200Mpa
Translucency	42%-45%
Vickers-hardness HV10	1300±50
Density	>3 (g/cm^3)
Sintered density	>6.02 (g/cm^3)
Chemical solubility	<50($\mu g/cm^3$)
Radioactivity	<0.1/$Bq.g^{-1}$
Fracture toughness	>5.5/($Mpa.m^{1/2}$)
CTE	(10.5±0.5)*$10^{-6}K^{-1}$

Aconia® 3D Mutilayer Technology



Incisal part	20%
Transition part	20%
Body part	50%
Cervical part	10%

SHT-ML

4 PARTS STRUCTURE

Percentage above represents the thickness of each parts in the disc

-3D - Shade+Strength +Translucency

-Excellent esthetic properties with integrated shade and seamless gradient

-Efficient, economical processing without the staining procedure

-Simplified zirconia material selection through wide indication application options

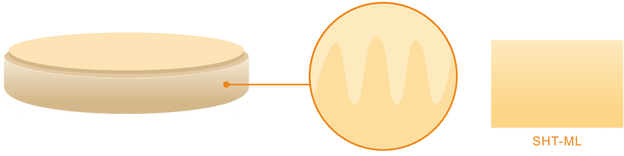
-Simplified the nesting process

-Consistent color matching

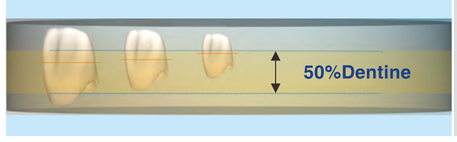
What is 3D Multilayer?

1. **Gradient chroma:**
   Increasing chroma from the top to bottom.
2. **Gradient translucency:**
   Increasing translucency from bottom to top
3. **Gradient flexural strength:**
   Increasing flexural strength from top to bottom

3D Multilayer	Translucency	Flexural strength
Aconia® TTML	49% ↕ 46%	600MPa ↕ 900MPa
Aconia® SHTML	46% ↕ 43%	900MPa ↕ 1100MPa



Aconia 3D Nesting Technology - Increased body part- 50%



Aconia 3D High Efficiency - Processing procedure

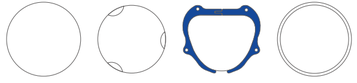
3D Multilayer	Heights: 14mm	16mm	18mm	20mm	22mm	25mm
20% Incisal part	2.8 mm	3.2 mm	3.6 mm	4 mm	4.4 mm	5 mm
20% Transition part	2.8 mm	3.2 mm	3.6 mm	4 mm	4.4 mm	5 mm
50% Body part	7 mm	8 mm	9 mm	10 mm	11 mm	12.5 mm
10% Cervical part	1.4 mm	1.6 mm	1.8 mm	2.0mm	2.2mm	2.5mm

SHT-Preshade

Create the best smile with high efficiency

-Excellent strength combined with 46% translucency
-A wide range of indications for full contour restorations
-Reproduce Vita shades perfectly
-Efficiency and ideal results

Technical data	
Flexural strength(3-point)	1000±100 Mpa
Translucency	46%
Vickers-hardness HV10	1300±50
Density	>3 (g/cm^3)
Sintered density	>6.02 (g/cm^3)
Chemical solubility	<50($\mu g/cm^3$)
Radioactivity	<0.1/$Bq.g^{-1}$
Fracture toughness	>5/($Mpa.m^{1/2}$)
CTE	(10.5±0.5)*$10^{-6}K^{-1}$

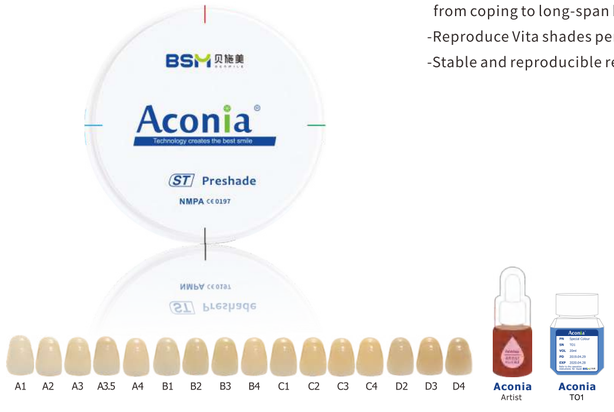


10mm-25mm

Indication							
Inlay & Onlay	Reduced crown	Full contour crown	Coping	Full contour anterior bridge (3 unit)	Full contour posterior bridge (3 unit)	Full contour bridge (≤7 unit)	Full contour bridge (≤14 unit)

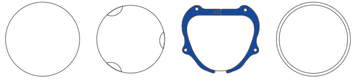
ST-Preshade

Create the best smile with speed



-Outstanding strength of 1250MPa combined with ideal translucency
-A wide range of indications for restorations from coping to long-span bridge
-Reproduce Vita shades perfectly
-Stable and reproducible results

Technical data	
Flexural strength(3-point)	1250±100 Mpa
Translucency	43%
Vickers-hardness HV10	1300±50
Density	>3 (g/cm^3)
Sintered density	>6.02 (g/cm^3)
Chemical solubility	<50($\mu g/cm^3$)
Radioactivity	<0.1/$Bq.g^{-1}$
Fracture toughness	>5.5/($Mpa.m^{1/2}$)
CTE	(10.5±0.5)*$10^{-6}K^{-1}$



10mm-25mm

Indication						
Inlay & Onlay	Full contour crown	Coping	Full contour anterior bridge (3 unit)	Full contour posterior bridge (3 unit)	Full contour bridge (≤ 7unit)	Full contour bridge (≤14unit)

TT

Create the bright smile: the professional solution

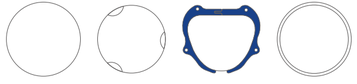
-Highest translucency up to 49%

-Artistic foundation for individualized restoration

-Esthetic alternative to lithium disilicate with double strength

Technical data	
Flexural strength(3-point)	> 700 Mpa
Translucency	49%
Vickers-hardness HV10	1300±50
Density	>3 (g/cm^3)
Sintered density	>6.02 (g/cm^3)
Chemical solubility	<50($\mu g/cm^3$)
Radioactivity	<0.1/$Bq.g^{-1}$
Fracture toughness	>3/($Mpa.m^{1/2}$)
CTE	(10.5±0.5)*$10^{-6}K^{-1}$

Aconia Standard　Aconia Master　Aconia Artist　Aconia TO1



10mm-25mm

Indication					
Veneer	Inlay & Onlay	Reduced crown	Full contour crown	Coping	Full contour anterior bridge (3 unit)

SHT

Create the vivid smile: the cost effective solution

-Outstanding translucency of 46%

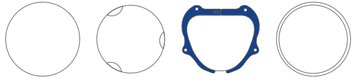
-Remarkable strength with reliable durability

-Wide indications for full contour

-Easy and fast coloring

Technical data	
Flexural strength(3-point)	1000±100 Mpa
Translucency	46%
Vickers-hardness HV10	1300±50
Density	>3 (g/cm^3)
Sintered density	>6.02 (g/cm^3)
Chemical solubility	<50($\mu g/cm^3$)
Radioactivity	<0.1/$Bq.g^{-1}$
Fracture toughness	>5/($Mpa.m^{1/2}$)
CTE	(10.5±0.5)*$10^{-6}K^{-1}$

Aconia Standard　Aconia Master　Aconia Artist　Aconia TO1



10mm-25mm

Indication							
Inlay & Onlay	Reduced crown	Full contour crown	Coping	Full contour anterior bridge (3 unit)	Full contour posterior bridge (3 unit)	Full contour bridge (≤7 unit)	Full contour bridge (≤ 14 unit)

ST

Create the universal smile: the classic solution

-Strong with good millability

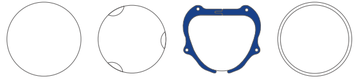
-Attractive translucency with outstanding strength 1250Mpa

-Wide indications from coping to long-span bridge

-Easy and fast coloring

Technical data	
Flexural strength(3-point)	1250±100 Mpa
Translucency	43%
Vickers-hardness HV10	1300±50
Density	>3 (g/cm^3)
Sintered density	>6.02 (g/cm^3)
Chemical solubility	<50(μg/cm^3)
Radioactivity	<0.1/Bq.g^{-1}
Fracture toughness	>5.5/(Mpa.m$^{1/2}$)
CTE	(10.5±0.5)*10^{-6}K^{-1}

Aconia Standard Aconia Master Aconia Artist Aconia TO1



10mm-25mm

Indication						
Inlay & Onlay	Full contour crown	Coping	Full contour anterior bridge (3 unit)	Full contour posterior bridge (3 unit)	Full contour bridge (≤7 unit)	Full contour bridge (≤14 unit)

HT$^+$

Create the unwavering smile: the economical solution

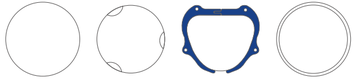
-The extraordinary strength of 1400Mpa grants a high level of process safety

-Easy veneering & individualizing

-Best option for coping & abutment

Technical data	
Flexural strength(3-point)	>1400 Mpa
Translucency	42%
Vickers-hardness HV10	1300±50
Density	>3 (g/cm^3)
Sintered density	>6.02 (g/cm^3)
Chemical solubility	<50(μg/cm^3)
Radioactivity	<0.1/Bq.g^{-1}
Fracture toughness	>9/(Mpa.m$^{1/2}$)
CTE	(10.5±0.5)*10^{-6}K^{-1}

Aconia Standard Aconia Master Aconia Artist Aconia TO1



10mm-25mm

Indication							
Inlay & Onlay	Full contour crown	Coping	Full contour anterior bridge (3 unit)	Full contour posterior bridge (3 unit)	Full contour bridge (≤7 unit)	Full contour bridge (≤14 unit)	Abutment

Coloring Liquids

Standard & Master

50ml

Standard

-Precisely matched to VITA* 16 color system
-Well-suited for both dipping and brushing (paint-on) methods
-Fast-coloring & no color difference between pontic and neighboring crowns
-Ideal results applied on Aconia white blanks by Aconia Coloring Technology

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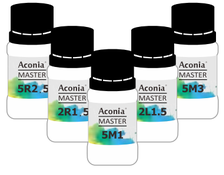

50ml

Master

-Precisely matched to VITA* 26 color system
-Well-suited for both dipping and brushing (paint-on) methods
-Fast-coloring & no color difference between pontic and neighboring crowns
-Ideal results applied on Aconia white blanks by Aconia Coloring Technology

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Artist

Artist

20ml

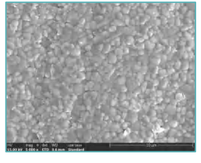
-Restore realistic, naturally lifelike appearance
-Reproduce rare and special colors
-Create esthetic art effect
-Enable individualized customization
-Start coloring process without preparing and mixing
-Deliver ideal results when applied on Aconia blanks

Special colors

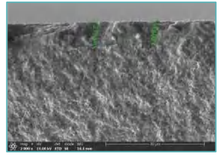
Zirconia Auxiliary Bonding Coating

-Optimum bonding strength
-Ultra thin, super simple
-Suitable for all zirconia restorations, especially ideal for zirconia veneers and inlays etc.
-Health and environment friendly

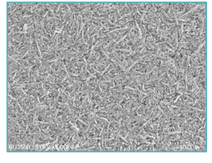
Good acid etching effect



Zirconia dense crystal structure
Electron micrograph（5000 times）

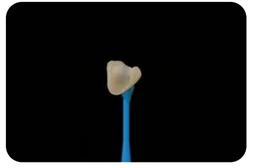


BSM Zirconia Bonding Coating thickness
Electron micrograph (2000 times)



Zirconia surface Electron micrograph (5000 times)
after acid etching with BSM Zirconia Bonding Coating

Nanometer-sized ultra thin, super simple with visualized read indicator brushing method



Before brushing

While brushing

Finished

Technical Data

Components			
SiO_2、Al_2O_3、Li_2O、K_2O、Na_2O other oxides			
Specification & Parameters			
Packed in Syringe	2g	Storage	In a clean and dry interior environment with non-corrosive gas and good ventilation.
Bonding Strength	With BSM Zirconia Bonding Coating		⩾20MPa
CTE	$(10.3\pm0.5)*10^{-6}K^{-1}$	**Flexural strength (3-point)**	95MPa
Transforming temperature	588℃	**Sintering temperature**	970℃
Chemical solubility	⩽100 (g/cm)		

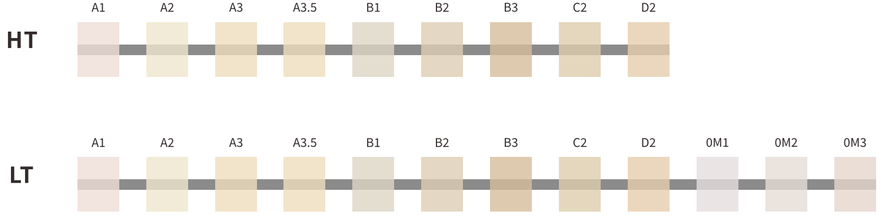
Glazic

Lithium disilicate glass ceramic

-Superior strength with the biaxial flexural strength ⩾ 450 MPa
-Realizing real aesthetics with natural opalescence& fluorescence
-Simple machinability
-An excellent minimally invasive restoration : ultra-thin veneer to 0.3 mm

Indication						
Veneer	Inlay & Onlay	Reduced crown	Partial Crown	Full contour(anterior)	Full contour(posterior)	Full contour anterior bridge

Available Shades



Technical Data

Components	SiO_2、Al_2O_3、Li_2O、K_2O、Na_2O other oxides	**Chemical solubility**	＜100 (g/cm)
Density	⩾2.2(g/cm^3)	**Specifications**	18.5*14.9*12.5、40*15*14 (mm)
Vickers hardness	480-520		
Flexural strength(biaxial)	⩾450MPa		
Fracture toughness	＞2.5 ($MPa.m^{1/2}$)		
CTE	(9.7±0.5)*$10^{-6}K^{-1}$		
Crystallization temperature	820℃		

Implant Abutment Solution

Besmile implant abutment solution includes the titanium premill,scanbody, analog, titanium disc, screwdriver sets and etc, using high-quality raw materials, with high-precision CNC and detection technology, which are trustworthy in terms of quality, accuracy, compatibility, and durability,achieving the outstanding aesthetic effect and restoration outcome.

ADVANTAGES

Best titanium material

Different systems available

ISO 13485 approved

High accuracy workmanship

Compatible with

NO	Brands	System
1	Dentium	SuperLine
2	OSSTEM	GS/TS
3	OSSTEM	SS
4	Straumann (ITI)	BL
5	Straumann (ITI)	TL
6	NobelBiocare	Replace
7	NobelBiocare	Active
8	DIO	SM
9	DIO	UF
10	Bego	Bego
11	Megagen	EzPlus
12	Dentsply	Xive
13	Dentsply	Ankylos
14	Zimmer	TSV
15	SIC	Invent
16	ICX	ICX

Titanium Premill

Analog

Scanbody

Screw

Screwdriver Set

Titanium Disc

More Materials

WAX

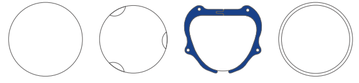
- Easy to mill
- High melting point
- Burn out completely without residue
- Compatible for making all male molds of oral tissue

10mm-25mm

Technical data	
Material	Polymer
Color	Blue/White
Density	0.89-0.93g/m^3
Drop melting point	106°C
Shore hardness	50-60 ShoreD

PMMA

- Excellent abrasion resistance
- Excellent finishing bright surface & polishing performance
- Excellent long-term shade stability and esthetics
- To fabricate fully and partially long-term temporary crown and bridge



10mm-25mm

Technical data	
Material	PMMA 100%
Color	A0 A1 A2 A3 Pink Transparent
Density	1.19g/m^3
Flexural strength	>125Mpa
Ash	<0.29%
Rate of contraction	<0.5%

Desktop 3D Printer

BSM-DP1000

Desktop Intelligent 3D Printer

BSM-DP1000 is specially developed for implant and fixed prosthetics applications. It adopts industrial-grade DLP technology with extremely high molding accuracy and efficiency, which is suitable for users who have high requirements for improving the precision and efficiency of product details.

Printing materials

Dental Model Material

Gingiva Material

Surgical-guide Material

Printing models

Gingiva mask

Surgical-guide

Die model

Dental model

Where accuracy meets efficiency

Accuracy

-75 micron level ultra-high molding accuracy, small pixel size, thin layers, stable and consistent power, help achieve accurate reproduction and precise presentation of complex models

Efficiency

-DLP Stereolithography technology is used with speed advantages.
-Printing speed 25-30mm/hour
-The forming plate can print 80~100 teeth at a time 4 jaws can be printed at a time (flat laid)

Quality

-Industrial-grade DLP projector and motion modules.
-Convenient release film replacement method , effectively increasing the printing success rate and improving the forming speed.

Compact

-A compact and simple visual body
-A good human-computer interaction experience
-With fine, smooth and low distorted glass lens

Projector

-High quality LED lights&narrow-band spectrum ensuring stable curing.
-High-resolution digital light source ensuring excellent performance up to 10000 hours continuous operation.

Technical Data

L*W*H	380×350×620mm	**Weight**	30kg
Print volume	144×81×80mm	**Light source**	DLP
XYZ accuracy	Z axis:5μm XY axis:75μm	**Forming speed(50um)**	30mm/h
Projector resolution	1920×1080	**Connectivity**	7' touch screen/USB
Layer thickness	50~100um	**Supportive language**	Chinese, English
Supportive file	stl.obj	**Humidity**	＜60%
Power supply	220V//200W	**Storage**	Avoid direct sunlight, ventilated environment
Temperature	10°C~30°C		

4-Axis Dental Milling Machine

BSM-400DW

Desktop Smart 4 Axis Dental Milling Machine

- **Safety:**Power-off protection;Error alarm
- **Intelligence:**Intuitive LCD touch screen;Multi-language:Chinese/English / Russian;Remote operation
- **Machinability:**Outstanding rigidity;High standard accuracy ±0.01mm
- **Open:**Multiple formats and materials;Modular processing, parameter optimization
- **High performance:**Good repetition accuracy±0.005mm;Strong spindle with 80000 RPM;Clamp 3 glass ceramics or 2 titanium rods at one time
- **Efficiency:**6-compartment tool auto changer;Tool life management function

Technical Data

Dimension(W/D/H)	Weight	Built-in burs	Linkage axis	Milling scope	Touch screen control
665mm*440mm*590mm	60kg	6 pieces	4 Axis	A axis: the front and the reverse milling	LCD touch screen
Voltage	**Air pressure**	**Rated power**	**Max. output power**	**Milling accuracy**	**Max rotate speed**
220V	0.65MPa	800W	1.2KW	±0.01mm	80000RPM
Repetiton accuracy	**Cooling system**	**Automatic tool changer**	**Singe processing quantity**	**Dry milling**	**Wet milling**
±0.005mm	Air cooling	Postive	Glass ceramic:3 Units + Titanium 2 units + Zirconia 3 units	Postive	Postive
Dimension of material in block					
Glass ceramic:18.5*14.9*12.5、40*15*14(mm)			Zirconia:20*19*15.5、39*19*11.5(mm)		
Burs type					
Tool kit for glass ceramic: 2.5mm、1.0mm、0.6mm		Tool kit for metal material: 3.0mm、2.0mm、1.0mm		Tool kit for zirconia: 2.0mm、1.0mm、0.6mm	

Two milling modes realized on one machine

Dry & wet milling for variety of materials — Wide range of indications to meet the clinical application

Titanium Premill **Glass Ceramic** **Zirconia**

High performance-Clamp 3 glass ceramics or 2 titanium premill at one time

Precision-masters not only conventional restoration work, but also more complex indications including long bridges and abutments

BSM-420W

4-Axis Dental Milling Machine

BM-420W, 4-axis simultaneous dental milling machine, adopts open processing system with premium spindle and imported core parts. It highlights high precision milling and high reliability, easy to dealing with sophisticated metal materials like titanium, cobalt-chrome, and composites, which well match the needs of high-quality crown and bridge, abutment and so on.

Millable Materials

Φ98mm Titanium Disc

Titanium Alloy Disc

Titanium Premill

Glass Ceramic

Millable Indications

Full contour(anterior)

Full contour(Posterior)

Full contour anterior bridge

Titanium crown bridge

Custom titanium abutment

Veneer

Inlay & Onlay

Convincing Features

Precise Milling

- Digital servo system with high resolution, ±0.005mm repetition accuracy.
- ±0.01mm installation accuracy for per spindle.
- ±0.02mm milling accuracy;0.3mm accuracy for Besmile glass ceramic

Stable operation

Heavy industrial quality and aerometal structure. The gantry structure and thermal expansion symmetric design ensure accuracy stability.

High Efficiency

- Premium spindle with 60,000RPM
- **Milling speed:** Titanium crown ≈30′ (Besmile titanium disc TA2 14mm)
- Abutment ≈22′ (Besmile titanium premill TC4)

Intelligent processing

- Smart CAM nesting strategy.
- Integrated PC with 9.7inch intelligent touch screen.
- Automatic changer tools with haptic tool detection and tool breakage monitoring.
- Automatically create efficient tool path, no sticky and easy to eliminate processing debris.

Technical Data

Dimension(W/D/H)	800mm*570mm*1650mm	**Remote tech assist**	Support
Linkage axis	4 axis	**Temperature**	5°C-40°C
Spindle power	1.8KW	**Weight**	300KG
Cooling system	Automatic water-cooling spindle	**Motor**	AC Servo-motor
Holding quantity (square)	10 units premill / 3 units glass ceramic	**Max. rotation speed**	60,000RPM
Holding quantity (round)	3 units premill, Φ98mm Titanium disc	**Voltage/Power**	220V/3.7KW
Tool quantity	6 pcs (round holder) / 6 pcs (square holder)	**Tool length detection**	Support
Tool type	Tool for metal	Φ6mm*3mm,Φ6mm*2mm,Φ6mm*1mm	
	Tool for glass ceramic	Φ6mm*2.5mm,Φ6mm*1mm,Φ6mm*0.6mm	
Air pressure	>0.65MPa	**Wet milling**	Support

BSM-450D

4 Axis Dental Milling Machine

Besmile has upgraded 4 axis BM-430D dental milling machine with a high-performance open system, which can meet the diverse needs of customers and ensure the long-term stability and accuracy.

- High speed data processing and analyzing NC system
- Compatible processing system
- Max.40,000RPM of the precise motorized spindle
- High-resolution step system
- Automatic changing and calibrating of the 4 milling burs
- Visualized processing

Technical Data

L*W*H	600mm*470mm*650mm	**Weight**	70kg
Built-in burs	3(2mm、1mm、0.6mm)	**Linkage axis**	4
Voltage / Power	220V // 850W	**Air pressure**	>0.5MPa
Temp.	5°C~40°C	**Motor type**	Step-motor
Millable Category	Zirconia、PMMA、Wax、PEEK etc.	**Millable prosthesis**	single crown, long bridge, inlay onlay, veneering etc.
Milling accuracy	±0.01mm	**Automatic tool-length measurement**	Positive / √
Cooling systeam	Air-cooled spindle	**Vacuuming system**	Mute vacuuming*
Remote assistance	Positive / √	**Dry milling**	Positive / √
Touch-screen control	8" LED touch screen	**Wet milling**	Negative / X

*match according to customer demand.

Millable Material

Zirconia

PMMA

Wax

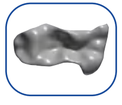
Wood

PEEK

Millable Restoration

Anatomic crown

Coping



Inlay/Onlay

Veneer

Crown Bridge

Abutment

5-Axis Dental Milling Machine

BSM-520D

5 Axis Dental Milling Machine

The 5 Axis dental milling machine is developed independently by Besmile, which possesses high-precision mechanical structure and high-resolution control system, providing a brand new operation experience for users.

- Stable and reliable performance
- An extensive service-life
- Automatic 4 burs changing system
- Integrative positioning module
- Accuracy up to 5μm of servo-control system
- Real-time monitoring by the sound-sensing alarm
- Remote control & service system

Technical data

L*W*H	680mm*570mm*780mm	**Weight**	123kg
Built-in burs	4(2mm、1mm、0.6mm)	**Linkage axis**	5
Voltage / Power	220V / 3.9Kw	**Air pressure**	>0.65MPa
Temp.	5°C~40°C	**Motor type**	Servo-motor
Millable Category	Zirconia、PMMA、Wax、PEEK etc.	**Millable prosthesis**	single crown, long bridge, inlay, onlay, veneering etc.
Milling accuracy	±0.005mm	**Automatic tool-length measurement**	Positive / √
Cooling systeam	Full automatic air-cooled spindle	**Vacuuming system**	Mute vacuuming*
Dry milling	Positive / √	**Remote assistance**	Positive / √
Wet milling	Negative / X	**Touch-screen control**	9.7" LED touch screen

*match according to customer demand.

Millable Material

Zirconia

PMMA

Wax

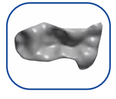
Wood

PEEK

Millable Restoration

Anatomic crown

Coping



Inlay/Onlay

Veneer

Crown Bridge

Abutment

Frame

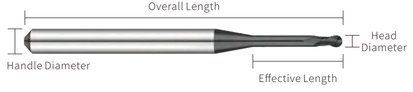
Splint

Milling Burs

MILLING BURS: Uncoated & Diamond

-Excellent durability for the milling cutters
-Economical working- cost - benefit ratio
-With diamond coating for precise milling results and smooth surfaces.

More brands available upon request: Roland, VHF, Imes-icore etc.



BSM-400DW

Glass Ceramic Milling Bur	Head Diameter	Handle Diameter	Overall Length	Effective Length
	2.5 (R1.25)	4	45	16
	1 (R0.5)	4	45	10
	0.6(R0.3)	4	45	10

BSM-400DW

Metal Milling Bur	Head Diameter	Handle Diameter	Overall Length	Effective Length
	3 (R1.5)	4	50	15
	2 (R1.0)	4	50	12
	1 (R0.5)	4	50	8

BSM-420W

Glass Ceramic Milling Bur	Head Diameter	Handle Diameter	Overall Length	Effective Length
	2.5 (R1.25)	6	40	15
	1(R0.5)	6	40	13
	0.6(R0.3)	6	40	10

BSM-450D

Zirconia Milling Bur	Head Diameter	Handle Diameter	Overall Length	Effective Length
	2(R1.0)	4	50	16
	1(R0.5)	4	50	16
	0.6(R0.3)	4	50	8

BSM-400DW

Zirconia Milling Bur	Head Diameter	Handle Diameter	Overall Length	Effective Length
	2(R1.0)	4	50	16
	1(R0.5)	4	50	16
	0.6(R0.3)	4	50	8

BSM-420W

Metal Milling Bur	Head Diameter	Handle Diameter	Overall Length	Effective Length
	3 (R1.5)	6	50	15
	2 (R1.0)	6	50	12
	1 (R0.5)	6	50	10

BSM-520D

Zirconia Milling Bur	Head Diameter	Handle Diameter	Overall Length	Effective Length
	2(R1.0)	4	50	16
	1(R0.5)	4	50	16
	0.6(R0.3)	4	50	8
	1.0(Flat)	4	50	14

Sintering Furnace

BSM-FC30

Fast Zirconia Sintering Furnace

BSM-FC30 zirconia fast sintering furnace is specially designed for completing the high-temperature sintering for all zirconia materials .It adopts unique “Sandwich” thermal insulation technology, achieving long-lasting heat preservation and energy saving.
And It offers customers with easy &efficient sintering experience with one-button operation and 3 hour fast sintering, and at the same time guarantees excellent sintering performance with its use of high-purity silicon carbide heating elements and circular-shape heating design.

Technical Data

Application area	Zirconia sintering	**Shortest sintering time**	3h(Cooling time included)
Width*depth*height	340mm*700mm*490mm	**Number of heating elements**	4 units
Weight	55kg	**Power supply**	220V/50Hz
Sintering space	ϕ90mm*50mm	**Rated power**	3kW
Sensor type	High - Precision type B thermocouple	**Max. withstand temperature**	1600℃
Number of sintering trays	1	**Working temperature**	⩽1550℃
Diameter of sintering trays	74mm	**Temperature control accuracy**	±3℃
Type of heating element	High purity silicon carbide	**Operation**	7''color touch screen
Max customized programs	100	**Heating rate**	⩽50℃/min
Heating type	Fast&Standard	**Max.number of sintered resorations**	25 single crwons

Pure and energy saving
- High purity silicon carbide heating elements
- Unique “Sandwich” thermal insulation technology

Efficient and fast sintering
- High powered fast heating
- Intelligent two-stage cooling procedure
- Shortest sintering time:in 3 hours(including cooling time)

Homogeneous temperature distribution
- PID intelligent temperature control technology
- A cylinder structure of the furnace chamber with heating elements distributed in a circular shape

Automatic lifting
- Achieving easy loading and unloading

Customized sintering available
- With more than 100 sintering program memory

Multiple sintering modes
- Supporting fast and standard sintering

Sintering Tray

Silicon Carbide Heating Element

Pure Zirconium Beads

BSM-S30

Standard Zirconia Sintering Furnace

BSM-S30 zirconia sintering furnace has been designed for processing zirconia restorations with a high degree of stability and efficiency.It adopts high-purity heating elements and homogeneous temperature distribution technology, providing reliable sintering output for single restorations, frameworks and bridges. The“Sandwich”thermal insulation design guarantees precise temperature control throughout the whole sintering process. The clear and intuitive user interface gives users a comfortable operating experience.

-Maximum units per time ⩾80
-More than 100 sintering program positions stored
-High-purity silicon molybdenum heating element
-High-performance insulation materials
-High-performance motors, steady operation
-True color touch screen
-Heating elements are U shape placed
-PID Intelligent temperature control

Technical Data

Dimension(W.D.H)	400mm*590mm*870mm	**Operation**	7" touch screen
Sintering Space	ϕ110mm*90mm	**Weight**	85kg
Number of heating elements	4	**Sensor**	High Precision type B thermocouple
Heating Element	High-purity silicon molbdenum	**Temperature control accuracy**	±3℃
Power Supply	220V/50Hz	**Heating rate**	⩽10℃/min
Working Temperature	⩽1600℃	**Rated power**	3kW
Heating Type	Standard		

Powerful

-Excellent and consistent sintering results
-Dependable performance on sintering single restorations, framework and bridges

Large capacity

-Stacking two sintering tray ensures simultanenous sintering of up to 60 units
-Up to 100 programs pre-installed to ensure diversified sintering needs

Precise temperature control

-Homogeneous distribution of heat in the firing chamber ensure high-quality sintering outcomes
-PID intelligent temperature controlling system to control temperature difference less than 3°C

Pollution free

-High-purity silicon molybdenum heating element
-High-performance insulation material

Easy to use

-Clear and intuitive user interface
-Well-arranged function buttons

Stable & Reliable

-Stable and low noise operation
-High-performance motor and belt
-Consistent shrinkage
-No deformation or inclusions

Sintering Tray

Silicon Molybdenum Heating Element

Pure Zirconium Beads

Artamic Stain/Glaze

Easy Operation

- With medium consistency, the paste will not fall apart or agglomerate easily.
- The paste can be applied evenly on the surface of zirconia and glass ceramics restoration.

Ultimate Aesthetics

- The fluorescence component in the paste gives lifelike effect on the restorations.
- With the brightening component, coloring and glazing can be done at one time.

Art.No.	Shade	Application
BSC 1	A	Mainly composed of red, yellow and little gray, used for dentin shade.
BSC 2	B	Mainly composed of dark yellow, little red and little gray, used for dentin shade.
BSC 3	C	Mainly composed of gray and little yellow, used for dentin shade.
BSC 4	D	Mainly composed of yellow, gray and little red, used for dentin shade.
BSC 5	Glaze	Provides gloss with transparency to the surface of the restoration.
BSC 6	Yellow	Yellow based with little red. Applied to give a yellowish tint,can be mixed with the 4 dentin shade.
BSC 7	Brown	Composed of brown and gray. Applied to reproduce dark brown stain.
BSC 8	Light Brown	Composed of yellow, little red and little gray.
BSC 9	Black	Applied to decrease the value of the chroma, can be mixed with the 4 dentin shades.

Art.No.	Shade	Application
BSC 10	Blue	Mainly applied to incisal part, to increase translucency.
BSC 11	White	Applied to create a crack effect, also for an opaque effect.
BSC 12	Pink	Applied to gingival area, also can be mixed with the 4 dentin shades.
BSC 13	Orange	Yellow based with a little red and gray shade.
BSC 14	Terracotta	Mainly composed of yellow and red, with a little black shade, applied to fissure.
BSC 15	Purple-gray	Purple based with a little gray shade, applied to incisal part, to increase the translucency.
BSC 16	Red	Applied to gingival area.
H	Blending liquid	Applied to adjust the paste consistence.

CTE	(25℃-500℃)（10.3±0.5）×$10^{-6}K^{-1}$
Chemical stability	＜100μg/cm^2
Storage	Room Temperature
Product specifications	Paste:4g/bottle Blending liquid:25ml/bottle
Strength	＞50MPa

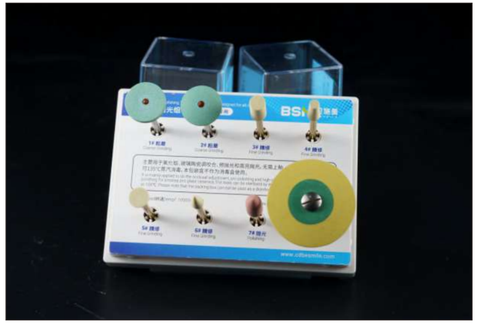
Indications

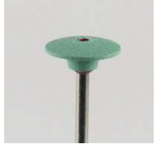
- veneering ceramics
- glass ceramics
- zirconium oxide (frameworks and full-contour restorations)

Grinding &Polishing Tool

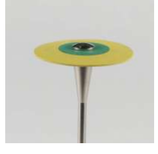
Specially designed for all ceramics

It is mainly applied to do the occlusal adjustment, pre-polishing and high-gloss polishing for zirconia and glass ceramics.

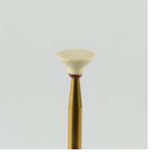




Coarse grinding tool



Polishing tool



Fine grinding tool

Product Category	Specification (MM)	Particle Size	Rotation speed (RPM)	Max rotation speed(RPM)
Coarse grinding tool	13*2 13*2	Medium Medium	10000-15000 10000-15000	20000 25000
Fine grinding tool	4*13 5*13 3.5*11 6.5*2	Thin Thin Thin Thin	10000-15000 10000-15000 10000-15000 10000-15000	20000 25000 20000 25000
Polishing	26*2 5*16	Ultra-thin /	10000-15000 10000-15000	20000 20000


BSM 贝施美
Aconia®
Technology creates the best smile
SHT
NMPA
ST-ML Multilayer
NMPA CE 0197
SHT-ML Multilayer
ALL - IN - ONE
Seamless Gradient
Shade | Translucency | Strength
Glazic
Neutral NT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Aconia®
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TT-ML Multilayer
NMPA CE 0197
TC4
Artamic