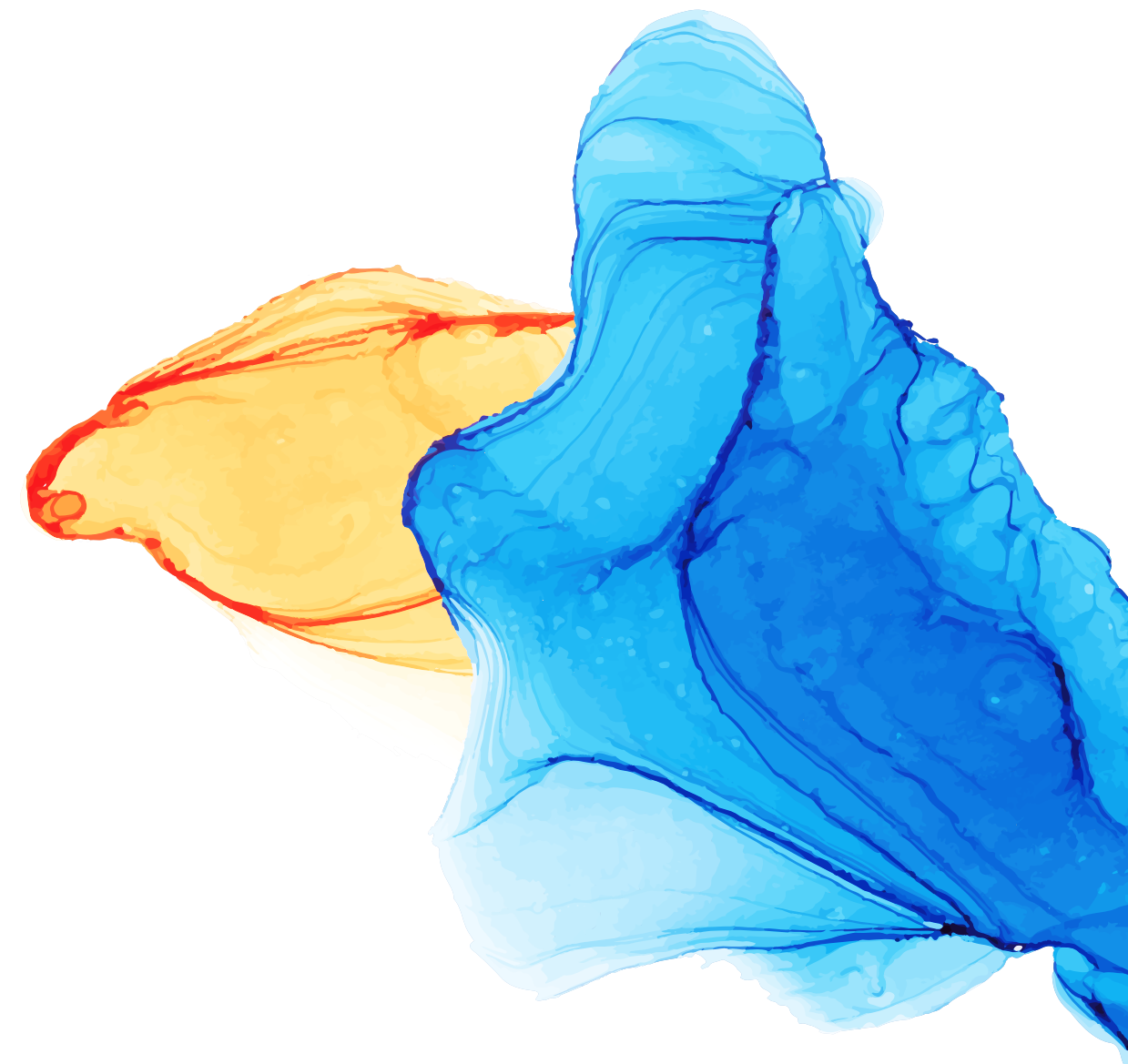




22 YEARS' R&D EXPERIENCE ON DENTAL ZIRCONIA BLANK AND MILLING MACHINE



Shenzhen Xiangtong Co.,Ltd

Address: 1101, Block B, Building 7, International Innovation Valley, Dashi Yi Road,
Xili Sub-district, Nanshan District, Shenzhen,Guangdong

Tel: 0086 755 8600 1804 Fax: 0086 755 8600 1486

E-mail: xtcera@xianton.com Web: <http://en.xtcera.com>

2023.6.30

CE 0197 CFDA FDA Cleared

CONTENTS

01 Dental Material

- 05 3D Multilayer Zirconia
- 06 SHT Multilayer Zirconia
- 07 3D White Zirconia
- 08 TT Air Zirconia
- 09 SHT Preshad Zirconia
- 10 SHT White Zirconia
- 11 HT Preshad Zirconia
- 12 HT White Zirconia
- 13 White zirconia blocks and Indications for reference
- 14 Co-Cr metal powder
- 15 Co-Cr soft metal blank
- 16 Glass ceramic

02 Dental Equipment

- 17 D5 5 axis dental milling machine
- 18 580DC ADC dental milling machine
- 19 500 Plus 5 axis dental milling machine
- 20 600 5 axis dental milling machine
- 21 600SE 4 axis dental milling machine
- 22 600S 4 axis dental milling machine
- 23 300 4 axis dental milling machine

03 Consumable

- 24 Milling burs
- 25 XT-STAIN/GLAZE kit
- 26 VITA 16 shades & 3D color liquid

COMPANY PROFILE

XTCERA was founded in 2001, owning over 22 years of R&D experience on Zirconium Dioxide Ceramic Material and Dental Milling Machine.

XTCERA has more than 1600 employees and an industrial park larger than 50,000 sq meters.

In the past 22 years, XTCERA has sold over 10000 units of dental milling machines and over a million pieces of Zirconia blanks every year to the global dental market.

We believe quality is the life of production and trust is the foundation of a healthy business relation.



Our products fully meet CE, FDA and NMPA standards

COMPANY HISTORY

2001
-
NOW

2001

Was founded in Shenzhen

2003

Become a high-tech incubation enterprise under the Science and Technology Bureau of Nanshan District

2005

Identified as a high-tech enterprise in Shenzhen

2008

Identified as a national high-tech enterprise



2011

Songshanhu R&D Center was founded, with a space more than 15000m²



2015

XTCERA has become one of the best-selling national brands in China

2018

The new R&D base was established in Dalingshan for 30,000m²



2021

Annual machine sales record break 1,000 units

QUALITY GUARANTEE IN EVERY PROCESSING STEP



APPLICATIONS

Crowns,bridges,anterior and posterior region
Personalized abutments on titanium base
Conical and telescope crowns
Multi-unit restorations on titanium base

FEATURE

Esthetics
Resisting fracture and chipping
Avoiding uneven shading of the edge
Anti-aging and wearproof

CHEMICAL COMPOSITION

ZrO₂ +HfO₂ >94.0
Y₂ O₃ 4-10
Al₂ O₃ ≤0.5
Other oxides ≤0.5

XTCERA HT/SHT/TT/3DML Materials

Translucency and Strength

	HT	SHT	TT Air	3D
Translucency	43%	47%	60%	55%→43%
Flexural strength	1250MPa	1050MPa	650MPa	750MPa—1250MPa

Biological properties

Items	ISO10993 Standards Requirements	Test Results
Cytotoxicity test	Cytotoxicity ≤1	No cytotoxicity
Sensitization test	Sensitization not allowed	No sensitization
Oral mucosa irritation test	Irritation not allowed	No stimulation
Acute systemic toxicity test	Sensitization not allowed	No acute oral toxicity
Genotoxicity test	Avirulent	AMES test:negative

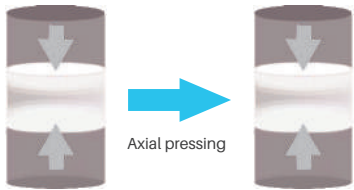
Physical and chemical properties

Model		HT	SHT	TT Air	3D
	Standards	Test results	Test results	Test results	Test results
Density(after sintering)	6.05±0.05g/cm ³	6.04g/cm ³	6.03g/cm ³	6.07±0.2g/cm ³	6.07g/cm ³
Chemical solubility	100μg/cm ²	64μg/cm ²	63μg/cm ²	64μg/cm ²	64μg/cm ²
CTE	(10±0.5)X10 ⁻⁶ K ⁻¹	Complied	Complied	Complied	Complied
Radioactivity	0.1Bq.g-1	Complied	Complied	Complied	Complied

Matured Pressing Technique (Homogeneous Density) Based on Years of Testing

Step 1

- 1 The first step is to shape the zirconia powder to blanks through the axial pressing
- 2 The pre-pressed blanks will be sealed into water-proof pressing sleeves for isostatic pressing



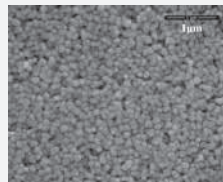
Step 2

- 1 Though time-consuming,isostatic pressing is essential for reducing material internal stress
- 2 The key procedure is to exert massive pressure during the isostatic pressing, which ensures homogeneous density in all blocks



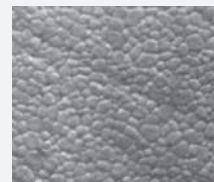
Uniformity of material structure

Scanning electron microscope image - Pre-sintered



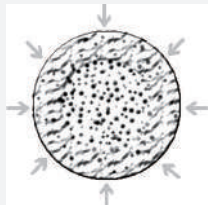
The unique space structure ensures the best processing performance and dyeing liquid permeability.

Scanning electron microscope image - after sintering



The density increases, the cavity shrinks to the most appropriate word closely connected.

- Low void
- Low unevenness

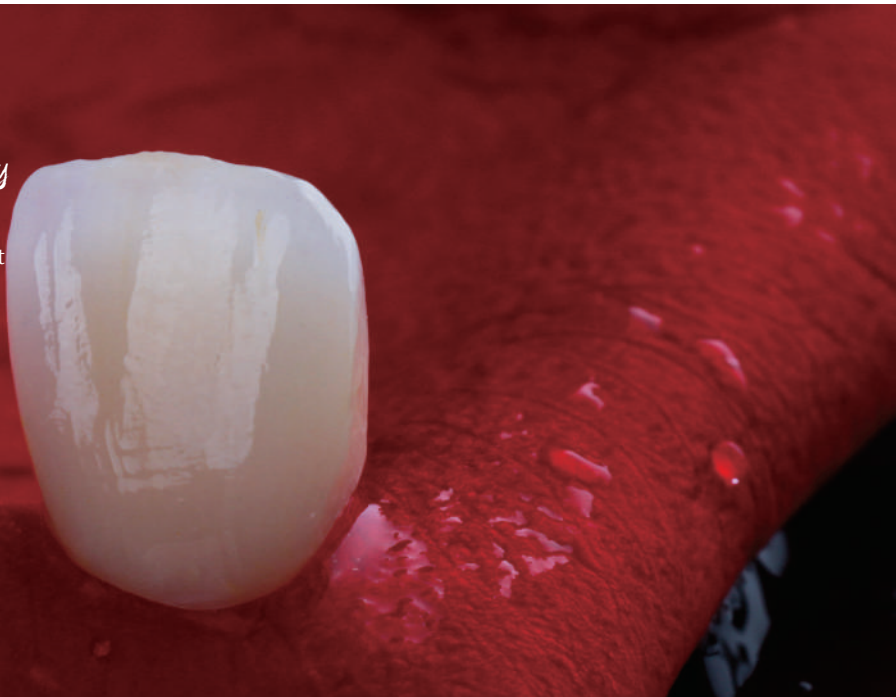


- Uniform density and mass
- homogeneity

3D MULTILAYER

Infinite Gradient of Beauty

Natural Color Transition, Pre-colored
Top High Transmittance with Natural Gradient
Simple and Less Process of Production



Vickers Hardness(HV)	≥1250	↔	≥1350
Strength(Mpa)	750	↔	1250
Color	Incisal	↔	Cervical
Translucency	55%	↔	43%
Fracture toughness	>5MPa.m ^{1/2}		

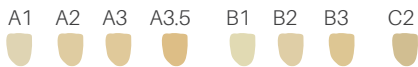
Chemical Composition

ZrO ₂ +HfO ₂	>90.5wt%
Y ₂ O ₃	4.5-10wt%
AL ₂ O ₃	<0.5wt%
Other Oxides	<0.5wt%

Properties

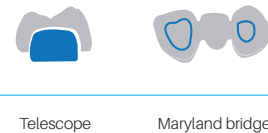
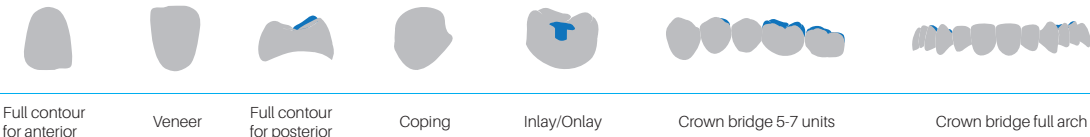
Sintering Density	6.0g/cm ³
Flexural Strength	≥750MPa
Vickers Hardness	≥1250HV
Chemical Solubility	<100μg/m ²

Regular providing pre-shaded blanks:



Other shades in Vita Classical shades are available with MOQ request

Indications



SHT MULTILAYER

Natural COLOR transition no need dyeing

47% Transmittance, 1050Mpa strength
The perfect balance of strength and beauty



Vickers Hardness(HV)	≥1300
Strength(Mpa)	1050
Color	Incisal ↔ Cervical
Translucency	47%
Fracture toughness	>5MPa.m ^{1/2}

Chemical Composition

ZrO ₂ +HfO ₂	>90wt%
Y ₂ O ₃	7.5wt%
AL ₂ O ₃	<0.5wt%
Other Oxides	<0.5wt%

Properties

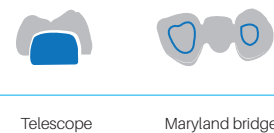
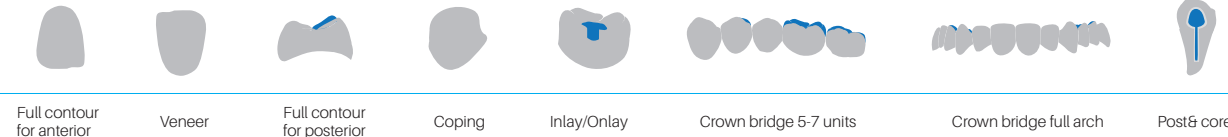
Sintering Density	6.0g/cm ³
Flexural Strength	≥1050MPa
Vickers Hardness	≥1300HV
Chemical Solubility	<100μg/m ²

Regular providing pre-shaded blanks:



Other shades in Vita Classical shades are available with MOQ request

Indications





3D WHITE
Unique 3D White which leaves you more space of dyeing and imagination!
Unique Dyeing System | White but Translucent with Natural Transition | Flexible Coloring to Make Teeth More Natural



Vickers Hardness(HV)	≥1250	↔	≥1350
Strength(Mpa)	750	↔	1250
Translucency	55%	↔	43%
Fracture toughness	>5MPa.m ^{1/2}		

Chemical Composition		Properties	
ZrO ₂ +HfO ₂	>90.5wt%	Sintering Density	6.0g/cm ³
Y ₂ O ₃	9.28wt%	Flexural Strength	≥750MPa
AL ₂ O ₃	<0.5wt%	Vickers Hardness	≥1250HV
Other Oxides	<0.5wt%	Chemical Solubility	<100µg/m ²

Indications



Full contour for anterior Veneer Full contour for posterior Coping Inlay/Onlay Crown bridge 5-7 units Crown bridge full arch



Telescope Maryland bridge



TT.AIR ZIRCONIA VENEER
Ultra-thin 0.1mm



Vickers Hardness(HV)	≥1250
Strength(Mpa)	650
Translucency	60%
Fracture toughness	>5MPa.m ^{1/2}

Chemical Composition		Properties	
ZrO ₂ +HfO ₂ +Y ₂ O ₃	≥99%	Sintering Density	6.0g/cm ³
Y ₂ O ₃	9.5%	Flexural Strength	≥650MPa
AL ₂ O ₃	≤0.5wt%	Vickers Hardness	≥1250HV
Other Oxides	≤0.5wt%	Chemical Solubility	64µg/m ²

Regular providing pre-shaded blanks:



Indications



Full contour for anterior Veneer Full contour for posterior Coping Inlay/Onlay



SHT PRE-SHADED

Precolored for simple process Perfect wide range of applications

High strength and toughness | Excellent corrosion resistance and long-term stability
Mainly used for bridges and posterior teeth

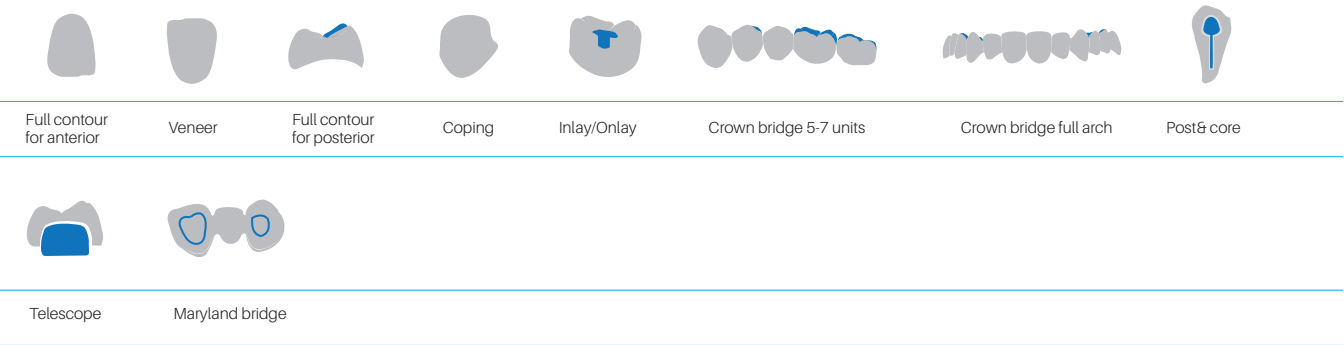


Vickers Hardness(HV)	≥1300
Strength(Mpa)	1050
Color	Vita classical shades
Translucency	47%
Fracture toughness	>5MPa.m ^{1/2}

Chemical Composition		Properties	
ZrO ₂ +HfO ₂	>90wt%	Sintering Density	6.05g/cm ³
Y ₂ O ₃	7.5wt%	Flexural Strength	≥1050MPa
AL ₂ O ₃	<0.5wt%	Vickers Hardness	≥1300HV
Other Oxides	<0.5wt%	Chemical Solubility	<100µg/m ²

Regular providing pre-shaded blanks:
A1 A2 A3 A3.5 B1 B2 B3 C2 BL2
Other shades in Vita Classical shades are available with MOQ request
Incisal Liquid : T2

Indications



SHT WHITE

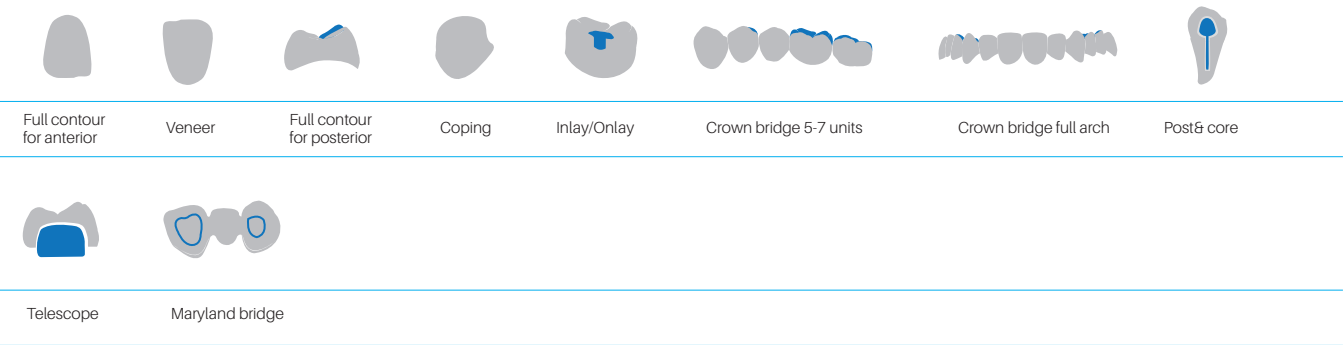
High strength and toughness
Excellent corrosion resistance and long-term stability
Mainly used for bridges and posterior restoration



Vickers Hardness(HV)	≥1300
Strength(Mpa)	1050
Color	Vita classical shades
Translucency	47%
Fracture toughness	>5MPa.m ^{1/2}

Chemical Composition		Properties	
ZrO ₂ +HfO ₂	>94.0wt%	Sintering Density	6.03g/cm ³
Y ₂ O ₃	7.5wt%	Flexural Strength	1050MPa
AL ₂ O ₃	<0.5wt%	Vickers Hardness	>1250HV
Other Oxides	<0.5wt%	Chemical Solubility	<100µg/m ²

Indications





HT PRE-SHADED

Preshaded Zirconia Blank Simplify your work flow

High strength & tenacity | Wear-proof and stability | Anti-aging properties



Vickers Hardness(HV)	> 1250
Strength(Mpa)	1250
Color	Vita classical shades
Translucency	43%
Fracture toughness	>5MPa.m ^{1/2}

Chemical Composition		Properties	
ZrO ₂ +HfO ₂	>94.0wt%	Sintering Density	6.05g/cm ³
Y ₂ O ₃	4.5wt%	Flexural Strength	1250MPa
AL ₂ O ₃	<0.5wt%	Vickers Hardness	> 1250HV
Other Oxides	<0.5wt%	Chemical Solubility	<100µg/m ²

Regular providing pre-shaded blanks:
A1 A2 A3 A3.5 B1 B2 B3 C2 BL2
Other shades in Vita Classical shades are available with MOQ request
Incisal Liquid : T2

Indications



HT WHITE

High strength & tenacity | Wear-proof and stability | Anti-aging properties



Vickers Hardness(HV)	> 1250
Strength(Mpa)	1250
Color	Vita classical shades
Translucency	43%
Fracture toughness	>5MPa.m ^{1/2}

Chemical Composition		Properties	
ZrO ₂ +HfO ₂	>94.0wt%	Sintering Density	6.03g/cm ³
Y ₂ O ₃	4.5wt%	Flexural Strength	1250MPa
AL ₂ O ₃	<0.5wt%	Vickers Hardness	> 1250HV
Other Oxides	<0.5wt%	Chemical Solubility	<100µg/m ²

Indications

White zirconia and indication for reference



**OPEN SYSTEM
ZIRCONIA BLANKS**

Specification	Translucency
φ98-10	HT/SHT/TT Air/3D
φ98-12	HT/SHT/TT Air/3D
φ98-14	HT/SHT/TT Air/3D
φ98-16	HT/SHT/TT Air/3D
φ98-18	HT/SHT/TT Air/3D
φ98-20	HT/SHT/TT Air/3D
φ98-22	HT/SHT/TT Air/3D
φ98-25	HT/SHT/TT Air/3D



**D SHAPE
ZIRCONIA BLANKS**

Specification	Translucency
90-72-10	HT/SHT/TT Air/3D
90-72-12	HT/SHT/TT Air/3D
90-72-14	HT/SHT/TT Air/3D
90-72-18	HT/SHT/TT Air/3D
90-72-20	HT/SHT/TT Air/3D
90-72-25	HT/SHT/TT Air/3D



**OPEN SYSTEM ZIRCONIA
BLANKS WITH FRAME**

Specification	Translucency
φ100-10	HT/SHT/TT Air/3D
φ100-12	HT/SHT/TT Air/3D
φ100-14	HT/SHT/TT Air/3D
φ100-16	HT/SHT/TT Air/3D
φ100-18	HT/SHT/TT Air/3D
φ100-20	HT/SHT/TT Air/3D
φ100-22	HT/SHT/TT Air/3D
φ100-25	HT/SHT/TT Air/3D



**Z SYSTEM
ZIRCONIA BLANKS**

Specification	Translucency
φ95-10	HT/SHT/TT Air/3D
φ95-12	HT/SHT/TT Air/3D
φ95-14	HT/SHT/TT Air/3D
φ95-16	HT/SHT/TT Air/3D
φ95-18	HT/SHT/TT Air/3D
φ95-20	HT/SHT/TT Air/3D
φ95-25	HT/SHT/TT Air/3D



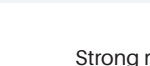
**S SYSTEM
ZIRCONIA BLANKS**

Specification	Translucency
20-14-16	HT/SHT/TT Air/3D
29-19-16	HT/SHT/TT Air/3D
40-14-16	HT/SHT/TT Air/3D
40-19-15	HT/SHT/TT Air/3D
65-25-22	HT/SHT/TT Air/3D



**MANUAL SYSTEM
ZIRCONIA BLANKS**

Specification	Translucency
43-25-16	HT/SHT/TT Air/3D
58-29-16	HT/SHT/TT Air/3D
60-25-16	HT/SHT/TT Air/3D
65-30-16	HT/SHT/TT Air/3D
75-36-16	HT/SHT/TT Air/3D
75-36-22	HT/SHT/TT Air/3D
87-56-16	HT/SHT/TT Air/3D
72-42-16	HT/SHT/TT Air/3D

Indications		3D Multilayer	3D White	SHT Multilayer	TT air	SHT white SHT pre-shaded	HT white HT pre-shaded	TT White
Aesthetic full contour for anterior		✓	✓	⊙	✓	⊙		✓
Full contour for posterior		✓	✓	✓	✓	✓	✓	✓
Coping		✓	✓	✓	✓	✓	✓	✓
Inlay/Onlay		✓	✓	✓	✓	✓	✓	✓
5-7 unit Bridges		✓	✓	✓	✗	✓	✓	✗
Unit 14 is connected to the bridge		⊙	⊙	⊙	✗	✓	✓	✗
Post & core				⊙	✗	⊙	✓	✗
Veneer		✓	✓	⊙	✓	⊙		✓
Telescope		✓	✓	✓	✗	✓	✓	✗
Maryland bridge		⊙	⊙	✓	✗	✓	✓	✗
Anterior bridge with 4 consecutive pontics		✗	✗	⊙	✗	⊙	⊙	✗
Bridge with 1 unit distal extensive pontic		✗	✗		✗		⊙	✗

Strong recommended: ✓ Recommended: ⊙ Not recommended: ○ Contraindication: ✗

CO-CR METAL POWDER

Complete technical solution,
good biocompatibility



Advantages:

1. Improved productivity and enhanced printing quality with diamond-chromium alloy powder while reducing wastage.
2. Best powder particle size reduces gasification, roughness lower after sintering and increase density.
3. Good biological compatibility and chemical stability due to strict compliance with YY/T-1702 medical standards.
4. Strong physical properties with a vibration density of >4.5g/cm³ and superior metal-ceramic bonding.
5. Comprehensive training programs and professional after-sales service team provide personalized guidance and solutions.

Properties

Chemical Composition: Co: 60.5% Cr:27% Mo: 5.5% W: 5% Si: 1.5%

Powder particle size: D10≥12μm, D90≤65μm, D50, 30±10μm

Proof Stress (Rp 0.2): ≥800Mpa

Metal ceramic bonding properties: ≥25MPa

Elongation: ≥2%

Elastic Modulus: ≥150Gpa

Corrosion Resistance: 200ug/cm²

Density: 8.5±5%g/cm³

Vickers Hardness: ≥450HV10

CTE: (14.3±0.5)×10⁻⁶ K⁻¹

Solidus Temp: 1380±50°C

Liquidus' Temp: 1430±50°C

Genotoxicity: Negative

Cytotoxicity: None

Oral mucosal irritation: None

Delayed hypersensitivity: None

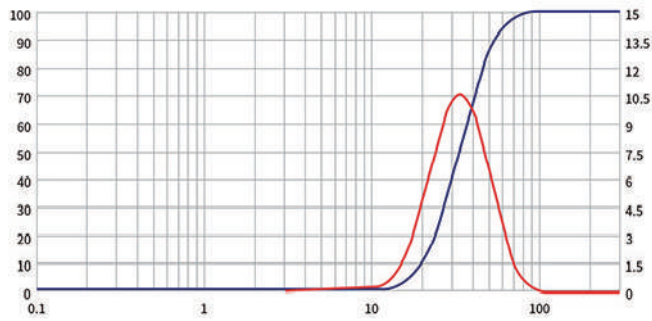
Acute oral systemic toxicity: None

Subchronic systemic toxicity: None

Sintering curve

Step	Temp	Gaseous environment	Time
1	Room temp-450 C	Vacuum, or inert gas	60Min
2	450 C-450 C		45Min
3	450 C-750 C		45Min
4	750 C-750 C		60Min
5	750 C-600 C	Furnace cooling	
6	<600 C	Open the furnace	
7	<300 C	Take out the restoration	

Powder size distribution curve



CO-CR SOFT METAL BLANK

Advantages:

- 1. Cost-effective, suitable for various types of processing systems to create metal crowns.
- 2. High strength, good toughness, superior wear resistance, and long clinical service life.
- 3. Non-toxic, non-radioactive, and excellent biocompatibility.
- 4. High machining accuracy, <20 microns.
- 5. Fully automated production, stable quality, and replaces traditional wax pattern embedding casting and gold turning to greatly simplify the production process.



Dental soft metal is a revolutionary product, a non-precious metal material that has the potential to disrupt the traditional PFM production mode. It will greatly reduce manual labor and speed up delivery time. The zirconium-chromium alloy can not only improve the overall quality of the product but also further enhance the factory's production efficiency.

Properties				Composition			
0.2% yield strength	500Mpa	Density	7.9±0.2g/cm³	Cobalt	66.0±2.0%	Manganese	<1.0%
Tensile strength	≥800Mpa	Corrosion resistance	<200μg/cm²	Chrome	28.0±2.0%	Iron	<0.8%
Vickers hardness	270±27	Liquidus temperature	(1410±50)°C	Molybdenum	5.0±1.0%	Carbon	<0.8%
Solidus temperature	(1350±50)°C	CTE	(14.2-14.8)X10⁻⁶ K⁻¹	Silicium	<1.0%	Other	<2.0%



Note: This product is suitable for argon protected sintering.

GLASS CERAMIC



Indications:

- Venner
- Inlay
- Onlay
- Partial crowns
- Anterior crown
- Posterior crown



Advantages:

Suitable for digital CAD/CAM process and chairside restoration for inlays, onlays, ultra-thin veneers and crowns. Excellent mechanical strength, high transmittance and natural aesthetic effect

Properties	
Transmittance	HT, LT
Radioactivity	Active concentration of uranium-238 <=1.0Bq/g;
Density after partial crystallization	2.3-2.6g/cm³
Density after complete crystallization	2.4-2.7g/cm³
Biaxial flexural strength	≥400MPa
Fracture toughness	≥1MPa.m ^{1/2}
Expansion coefficient	10-11X10⁻⁶K⁻¹
Vickers hardness	≥550HV02
Chemical solubility	≤100μg/cm²

Regular shades:



Special shades:

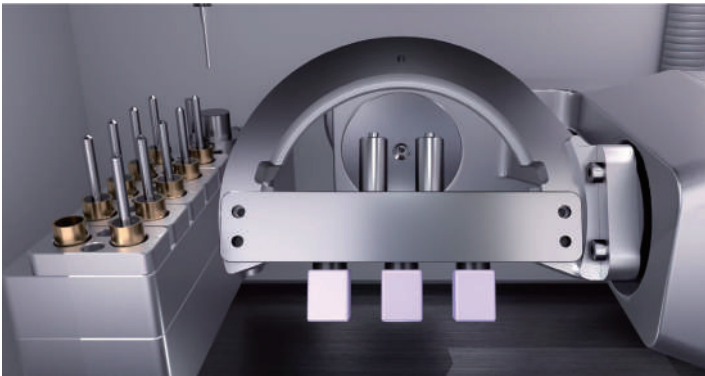


Crytalization program

Initial temp (°C)	Dry time (Min)	Heating rate (°C/Min)	Keep the temp (°C)	Residence time (S)	Starting vacuum (°C)	End vacuum (°C)	Heating rate (°C/Min)	Residence time (°C)	Keep the temp (Min)	Starting vacuum (°C)	End vacuum (°C)	End temp (°C)
450	6	60-90	810	10	550	810	30	830-850	5-10	810	830-850	550



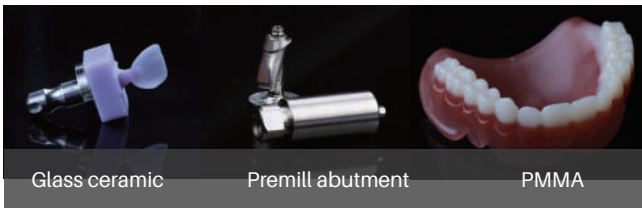
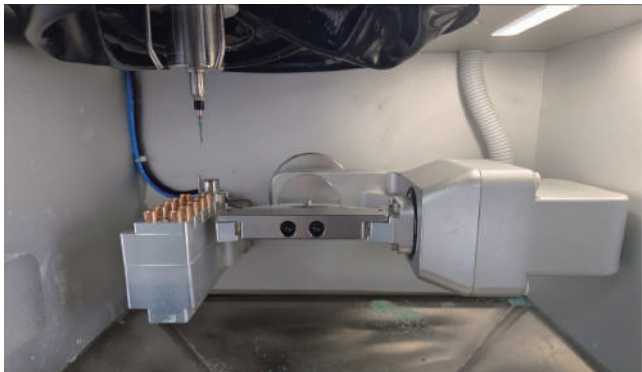
D5 Milling Machine



Advantages

- Integrated internal circulating vacuum and water cooling system
- Overall sealed working chamber design
- Simple and intelligent operation
- with one button dry/wet function switch
- Remote control for smarter operation

Properties	
Name:	D5 Milling Machine
Dimension:	732X520X666(mm)
Net weight:	140kg
Input voltage:	AC 220V
Spindle power:	0.5kw
Axis quantity:	5
Milling range:	XYZ: 150/115/93mm A: 360° B: ±30°
Milling mode:	Wet and dry
Max speed:	60,000 rpm
Max feeding speed:	XYZ: 6000 mm/min
Bur capacity:	10
Bur changing:	Automatic
Spindle cooling:	Air cooling
Materials:	Zirconia, Glass ceramic, PMMA, Premill abutment
Milling time:	Zirconia: 8 mins, Glass ceramic: 20mins, Premill abutment: 25 mins



580DC Milling Machine



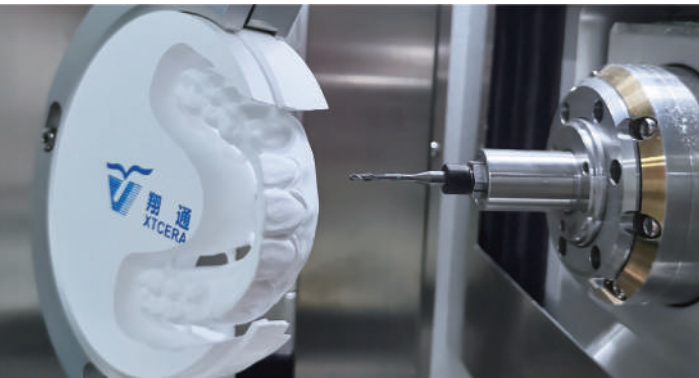
Advantages

- Intelligent automatic Disc changing enables continuous processing 24/7
- Large capacity material storage can hold up to 12 plates with an open fixture design that's not limited to specific brands
- Smart monitoring automatically detects disc lifespan and wear
- Remote operation for stronger situational awareness, real-time monitoring of work status, and the ability to control the machine remotely

Properties	
Name:	580 DC Milling Machine
Dimension:	950X750X1740(mm)
Net weight:	360kg
Input voltage:	AC 220V
Spindle power:	1.8kw
Axis quantity:	5
Milling range:	XYZ: 165/110/90mm A: ±30° B: 360°
Milling mode:	Dry milling
Max speed:	60,000 rpm
Max feeding speed:	XYZ: 6000 mm/min
Bur capacity:	10
Tool change mode:	Automatic
Spindle cooling:	Water cooling
Disc change mode:	Automatic
Disc changer magazine:	12
Materials:	Zirconia, Wax, PMMA
Milling time:	Zirconia crown: 8mins, Wax: 3mins, PMMA: 10mins,



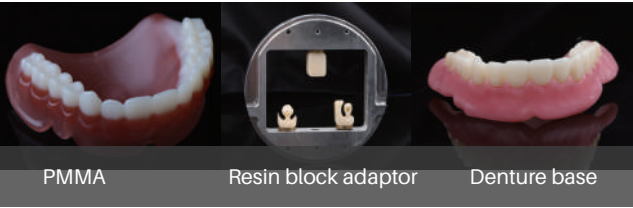
500 Plus Milling Machine



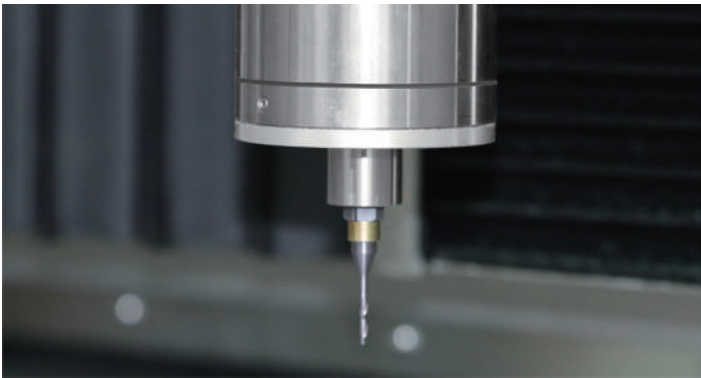
Advantages

- Outstanding performance with a highly sealed processing chamber for better dust-proofing and accuracy as high as 2 microns
- Intelligent monitoring with stronger situational awareness, warning of work status and malfunctions, and convenient remote control operation
- Wide applicability to process various materials, including fast cutting for hard materials
- Safety ensured with automatic start-stop when opening/closing doors to reduce safety hazards and automatic restart after interruption
- Outstanding appearance with a simple and sleek design, glossy surface finish, and easy-to-clean surface

Properties	
Name:	500 Plus Milling Machine
Dimension:	630X730X700(mm)
Net weight:	197kg
Input voltage:	AC 220V
Spindle power:	1.2kw
Axis quantity:	5
Milling range:	XYZ: 110/160/80mm A: ±35° B: 360°
Milling mode:	Dry milling
Max speed:	60,000 rpm
Max feeding speed:	XYZ: 6000 mm/min
Bur capacity:	8
Bur changing:	Automatic
Spindle cooling:	Water cooling
Materials:	Zirconia, Wax, PMMA, PEEK, Soft metal
Milling time:	Zirconia crown: 8mins, Wax: 3mins, PMMA: 10mins, PEEK: 10mins, Soft metal: 10mins



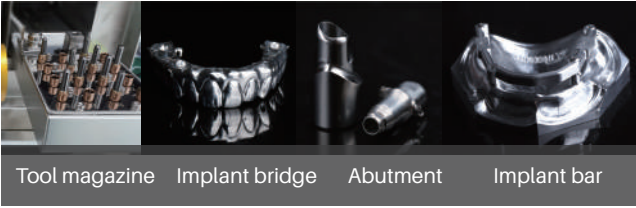
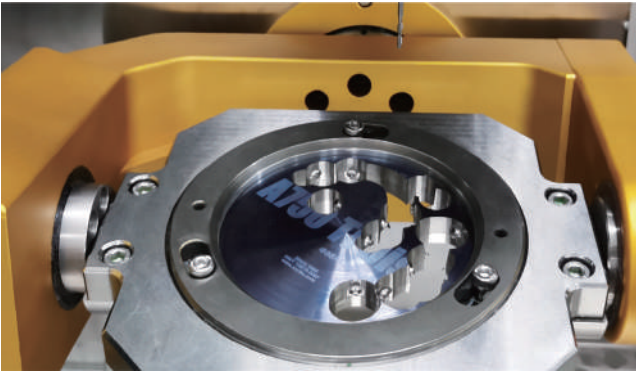
600 Milling Machine



Advantages

- 5-axis milling with a B-axis rotation range of up to 40 degrees
- Stable structure with a cast iron body
- High-performance 2.7kw spindle
- 1-micron repeat positioning accuracy
- Automatic tool changer with 16 tool holders.
- Unmatched base, implant rod, and implant bridge cutting performance.

Properties	
Name:	600 High Power Milling Machine
Dimension:	1170X820X1830(mm)
Net weight:	920kg
Input voltage:	AC 220V
Spindle power:	2.7kw
Axis quantity:	5
Milling range:	XYZ: 320/130/150mm A: 360° B: ±40°
Milling mode:	Wet milling
Max speed:	60,000 rpm
Max feeding speed:	XYZ: 6000mm/min
Bur capacity:	16
Bur changing:	Automatic
Spindle cooling:	Water cooling
Materials:	CoCr, Titanium, PMMA, Wax, Glass ceramics, Hybrid ceramics
Milling time:	Crown: 30mins, Abutment: 35-50mins, Bar: 2hrs





600SE Milling Machine

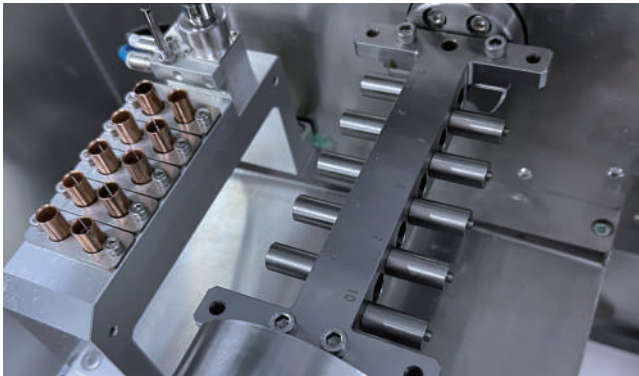


Advantages

- Vertical gantry structure with a cast body for stable structure
- Double-end supported 4-axis for better rigidity and stability
- Large capacity tool storage compatible with multiple material tools
- Various standard fixtures and customized options to meet customer needs
- Smart monitoring automatically detects tool lifespan and wear
- Remote control for smarter operation

Properties

Name:	600SE Milling Machine
Dimension:	730X600X1750(mm)
Net weight:	370kg
Input voltage:	AC 220V
Spindle power:	1.8kw
Axis quantity:	4
Milling range:	XYZ:190/110/110mm B:360°
Milling mode:	Wet&dry milling
Max speed:	60,000 rpm
Max feeding speed:	XYZ: 6000 mm/min
Bur capacity:	10
Bur changing:	Automatic
Spindle cooling:	Water cooling
Materials:	Titanium, PMMA, wax, glass ceramic, premill-abutment
Milling time:	Glass ceramic: 17mins, wax: 3mins, premill-abutment: 25mins



600S Milling Machine

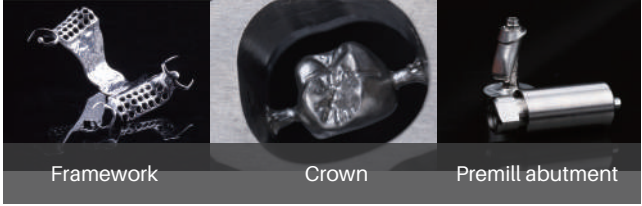


Advantages

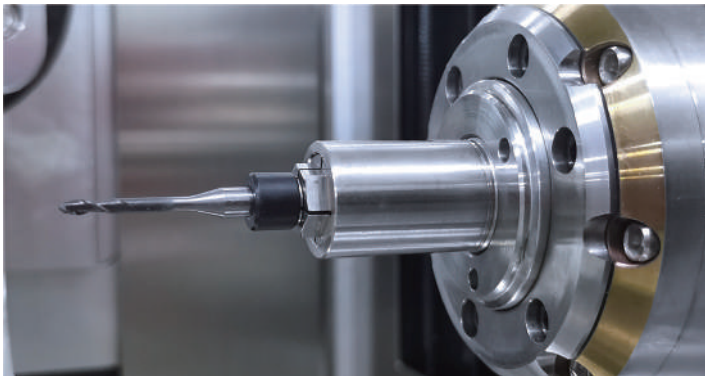
- 4-axis milling with a B-axis rotation of 360 degrees.
- Gantry frame with a cast body for stable structure.
- High-performance 4kw spindle.
- Repeat positioning accuracy of 1 micron.
- Automatic tool changer with 8 tool holders.
- Unmatched cutting performance for full crowns and metal frames.

Properties

Name:	600S High Power Milling Machine
Dimension:	1260X820X1830(mm)
Net weight:	1006kg
Input voltage:	AC 220V
Spindle power:	4kw
Axis quantity:	4
Milling range:	XYZ: 360/240/150mm A: 360°
Milling mode:	Wet milling
Max speed:	40,000 rpm
Max feeding speed:	XYZ: 6000mm/min
Bur capacity:	8
Bur changing:	Automatic
Spindle cooling:	Water cooling
Materials:	Titanium, Titanium Alloy, Co-Cr Alloy
Milling time:	Crown: 25mins, Framework: 2-4hrs



300 Milling Machine



Advantages

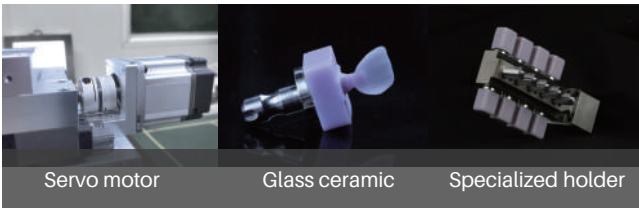
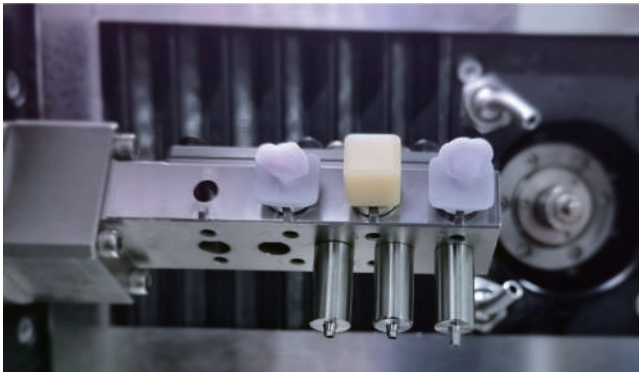
Dry/wet dual-purpose with a long spindle lifespan and four-axis linkage

Accurate harmonic drive with A-axis rotation of up to 360 degrees

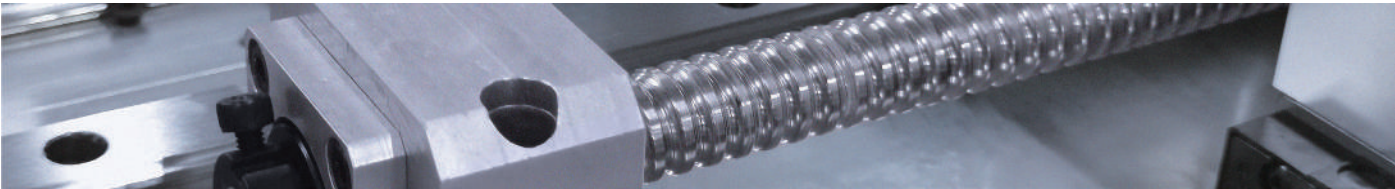
High-powered 1800W industrial spindle for quick machining of high-hardness materials like PEEK and PMMA

Properties

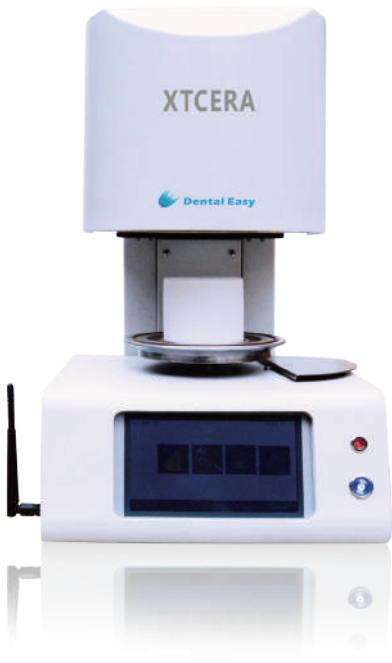
Name:	300(w/i) Milling Machine
Dimension:	730X720X620(mm)
Net weight:	170kg
Input voltage:	AC 220V
Spindle power:	1.8kw
Axis quantity:	4
Milling range:	XYZ: 125/130/80mm A: 360° (±20° positioning processing)
Milling mode:	Wet (dry milling optional)
Max speed:	60,000 rpm
Max feeding speed:	XYZ: 6000 mm/min
Bur capacity:	6
Bur changing:	Automatic
Spindle cooling:	Water cooling
Materials:	Premill abutment, Glass ceramic, Resin, PMMA, Zirconia
Milling time:	Glass Ceramic: 17mins, PMMA: 12mins, Premill abutment: 25mins, Resin: 15mins



Servo motor Glass ceramic Specialized holder



Porcelain furnace



Description	
Net weight (N.W)	24kg
Machine size	320X392X426mm
The highest sintering temperature is 1200°C	
Life of electric heating couple increased by more than 50%	
Accurate furnace temperature, suitable for all ambient temperatures	
14 bit AD conversion, more accurate temperature, super clear crown bridge	
Automatic detection of all key parameters and intelligent fault judgment	
Industrial grade high quality parts selection,long -life	
Mobile Internet/Internet Interconnection (IoT)	

Sintering furnace



Description	
Net weight (N.W)	58kg
Machine size	548X415X830mm
Sintering chamber size	φ116X130mm
Mobile internet connection, auto fault diagnosis	
New ultrapure heating element, zirconia perfectly sintered	
14 digits AD transition, more accurate temperature	
Industrial grade design, long-life,stable and reliable	
Full parameter detection, visible machine state	
Standard industrial antiknock touch screen	
Annular chamber, more uniform temperature, maximum temperature can reach to 1600°C	
Preset start time is available	

X-STAIN/GLAZE KIT

Rich colors, smooth texture
Bright and natural with a translucent look
Realistic color, perfectly vivid
Easy to use and suitable for a wide range of applications

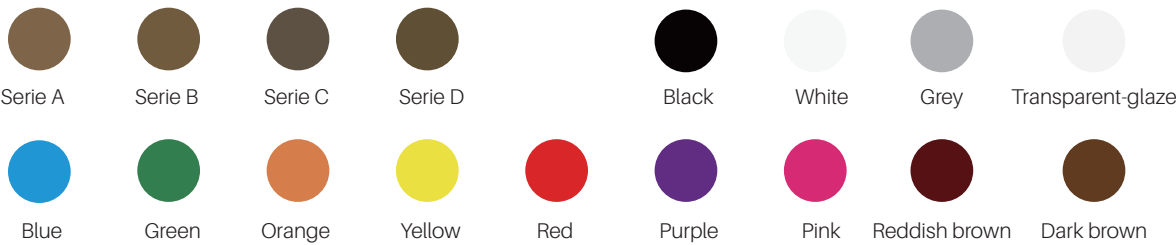


Properties

Three-point Flexural Strength	≥50MPa
Chemical solubility	<100µg·cm-2
Fracture toughness	≥0.7MPa
Linear expansivity	(9.1±0.5)×10-6K-1
Glass transition temperature	(470±20) °C



Color:



Sintering program:

Initial temp (°C)	Dry time (Min)	Heating rate (°C/Min)	Keep the temp (°C)	Residence time (S)	Cooling time (S)	End temp (°C)
450	5-10	45-60	810-830	90-120	200	500



VITA classical

Dentine Shade

0M1 0M2 0M3

A1 A2 A3 A3.5 A4

B1 B2 B3 B4

C1 C2 C3 C4

D2 D3 D4



VITA 3D-MASTER

Dentine Shade

0M1 0M2 0M3

1M1 1M2

2L1.5 2L2.5 2M1 2M2 2M3 2R1.5 2R2.5

3L1.5 3L2.5 3M1 3M2 3M3 3R1.5 3R2.5

4L1.5 4L2.5 4M1 4M2 4M3 4R1.5 4R2.5

5M1 5M2 5M3



Diluent Liquid



Incisal Liquid



Color Guide

XTCERA Special shades : P1 P2 P3 - gingival shade , O1 O2 - fossa shade, G2 - incisal shade

Optimized for all-ceramic restoration,with a wide choice of shades.
Best performed on zirconia blocks
Thorough penetration throughout crown to ensure predictable colors
Highly match the natural colors of teeth, shorter dyeing duration, easy operation.



ZIRCONIA BURS

Size	T1	T1(long)	T2	T2(long)	T3	T4(endmill)
Cut-edge Diameter(mm)	2	2	1	1	0.6/0.3	1
Cut-edge Length(mm)	6	6	4	4	2	3
Effective Length(mm)	16	22	16	20	8	16
Shank Size(mm)	3/4	3/4	3/4	3/4	3/4	3/4
Whole Length(mm)	50	50	50	50	50	50



GLASS CERAMIC BURS

Size	T1	T2	T3
Cut-edge Diameter(mm)	2.5	1	0.6/0.3
Effective Length(mm)	16	10	10
Shank Size(mm)	3	3	3
Whole Length(mm)	45	45	45



METAL BURS

Size	T1	T2	T3
Cut-edge Diameter(mm)	3	2	1.5
Cut-edge Length(mm)	4.5	3	2.5
Effective Length(mm)	14	12	8
Shank Size(mm)	4	4	4
Whole Length(mm)	50	50	50



PMMA BURS

Size	T1	T2	T3	T4(endmill)
Cut-edge Diameter(mm)	2	1	0.6	0.6
Cut-edge Length(mm)	4	4	2	2
Effective Length(mm)	16	16	8	8
Shank Size(mm)	3/4	3/4	3/4	3/4
Whole Length(mm)	50	50	50	50

