# HUGE



# Dental CAD/CAM Materials

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GLOBAL DENTAL SUPPLIER



### **O**] / **Digital Full Denture**

()2 / PMMA BLOCK
05 / Multilayer PMMA BLOCK
06 / Monolayer PMMA BLOCK
06 / Pink PMMA BLOCK
07 / Clear PMMA BLOCK
07 / Full Denture PMMA BLOCK

() 9 / Zirconia Block
Zirconia Block(Premium)
11/High Translucency (HT)
11/High Strength (HS)
12/Anterior Translucency (AT)
12/Multi-layered High Translucency (MHT)
13/3D Multilayer Zirconia Block

Zirconia Block (Prime)
14/High Translucency (HT)
14/High Strength (HS)
16 / Casting Wax
17 / i-Vinci Oral Scanner
19 / Vinci 3D Printer
21 / Memorabilia

# **HUGE** CONTENTS

#### **Advantages** $(\mathbf{)}$

## **DIGITAL FULL DENTURE**

A complete manufacturing process for the rapid digital production of removable full-arch dentures





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# Pink PMMA BLOCK < Removable structures for dentures(Denture Base)

### Multilayer PMMA BLOCK 🔇





# HUGE · PMMA BLOCK

### More Than A Temporary Material



### **HIGHLY CROSS-LINKED PMMA MATERIAL**

Ensures high wear-resistance,low moisture absorption and offers superior performance.



### **CONSISENT SHADES IN 24 COLORS**

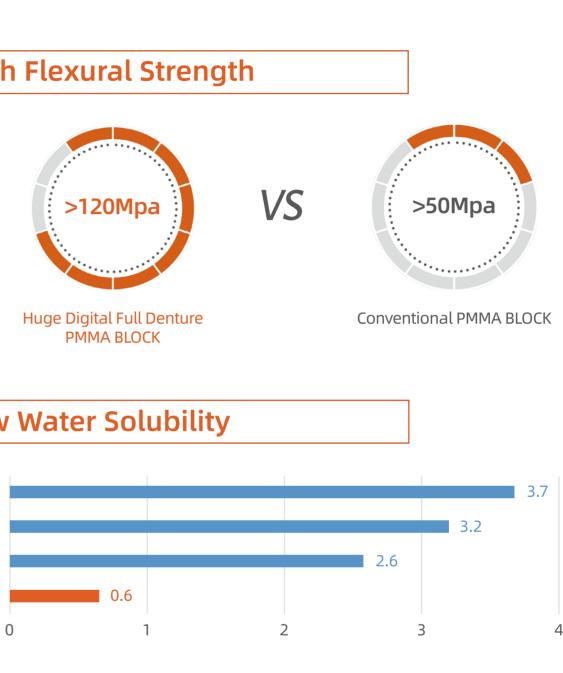
HUGE is the global supplier in the world which offers 22 shades for Multilayer PMMA Block and 24 shades for Monolayer PMMA Block.



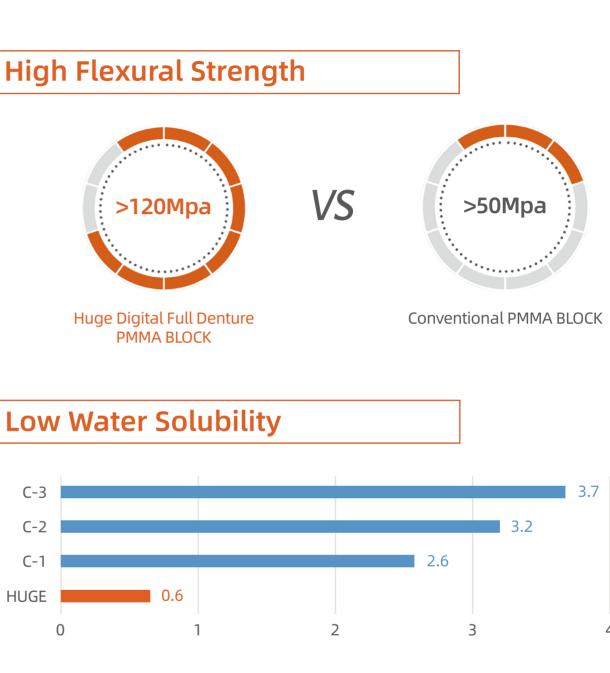
### ALL SIZES TO FIT ALL **TYPES OF MACHINES**

HUGE PMMA BLOCKS are guaranteed to perfectly fit all types of milling machines.





### **Low Water Solubility**



### The Most Shades & Systems Choices

### Not only Classic 16 colors.

Available for 7 different systems and accept customized system.







### Multilayer PMMA BLOCK

More than a temporary material

### Shades Available

16A-D, 2M2, BL, BL1, BL2, BL3, BL4

A1	B1	C1	D2	BL
A2	B2	C2	D3	BL1
A3	B3	C3	D4	BL2
A3.5	B4	C4	2M2	BL3
A4				BL4

### Systems Available

Open systemφ98/φ100/φ104/φ108mm Z-Systemφ95mm/ AG-System φ89 S-System 20mm/40mm/65mm cube with handle L-System 72mm cube R-System 76mm cube

### Technical Data

Properties	Parameter
Flexural strength	>120 Mpa
Modulus of Elasticity	>2200Mpa
Water Absorption	<20µg / mm³
Water Solubility	<0.8µg/mm³



- Seamless Gradient, natural and artistic
- Easy to operate, stable and efficient, Excellent biocompatibility
- Not only for temporary crowns and bridges but also for removable structures for dentures.



### Thickness: 10mm to 30mm

### Monolayer PMMA BLOCK More than a temporary material



### 16A-D, A0, B0, BL, BL1, BL2, BL3, BL4

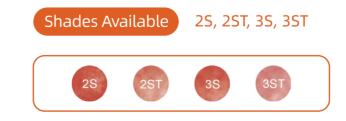
A0	B0	C1	D2	BL
A1	B1	C2	D3	BL1
A2	B2	C3	D4	BL2
A3	B3	C4	2M2	BL3
A3.5	B4			BL4
A4				

### Systems Available

Open systemφ98/φ100/φ104/φ108mm Z-Systemφ95mm/ AG-System φ89 S-System 20mm/40mm/65mm cube with handle L-System 72mm cube R-System 76mm cube

## Pink PMMA BLOCK

- Suitable material for milling a denture base
- Easy to operate, stable and low water absorption, Excellent biocompatibility
- For long-term temporaries with a wear period up to 12 months





### Thickness: 10mm to 30mm

- Mills purely and polishes easily
- Easy to operate, stable and efficient, Excellent biocompatibility
- For long-term temporaries with a wear period up to 12 months

More than a temporary material





### **Clear PMMA BLOCK**

Recommend Application:

Dental night guard, Implant guide Male mold for casting



- Crystal clear surface with outstanding translucency
- Burns out without a trace

Shad	les A	Avai	lab	le
51100	10.57	wan	un	·C .

Pink, Orange, Clear, Red

### Technical Data

Properties	Parameter
Flexural strength	>120 Mpa
Modulus of Elasticity	>2200Mpa
Water Absorption	<20µg / mm³
Water Solubility	<0.8µg/mm³

### Full Denture PMMA BLOCK

More than a temporary material



- Reduce production process
- Denture Arch is stable on the denture base.
- Better accuracy than hand-made full denture.

### Shades Available

Denture Base: 25 3ST 3S 3ST Denture Arch: 16A-D, 2M2, BL, BL1, BL2, BL3, BL4

### Technical Data

Properties	Parameter
Flexural strength	>120 Mpa
Modulus of Elasticity	>2200Mpa
Water Absorption	<20µg / mm³
Water Solubility	<0.8µg/mm³

### **PMMA** specification sheet

DIMENSION	(mm)	MONOLAYER PMMA	MULTILAYER PMMA	Clear PMMA
	Ф98 х 10	$\checkmark$	$\checkmark$	$\checkmark$
	Ф98 х 12	$\checkmark$	$\checkmark$	$\checkmark$
6 <sup>36</sup>	Ф98 х 14	√	$\checkmark$	$\checkmark$
07 093.5	Ф98 х 16	√	1	$\checkmark$
	Ф98 х 18	$\checkmark$	1	$\checkmark$
	Ф98 х 20	$\checkmark$	$\checkmark$	$\checkmark$
	Ф98 х 22	$\checkmark$	1	$\checkmark$
	Ф98 х 25	$\checkmark$	1	1
	Ф98 х 30	$\checkmark$	1	1
	Ф98 х 40	$\checkmark$	1	1
	Ф95 х 10	V	$\checkmark$	$\checkmark$
	Ф95 х 12	V	1	$\checkmark$
	Ф95 х 14	1	$\checkmark$	$\checkmark$
0 <sup>95</sup>	Ф95 х 16	$\checkmark$	$\checkmark$	$\checkmark$
	Ф95 х 18	$\checkmark$	$\checkmark$	$\checkmark$
	Ф95 х 20	$\checkmark$	$\checkmark$	$\checkmark$
	Ф95 х 22	√	$\checkmark$	1
	Ф95 х 25	√	$\checkmark$	1
	Ф95 х 30	√	$\checkmark$	1
	Ф95 х 30	√	$\checkmark$	1
	89 x 71 x 12	$\checkmark$	$\checkmark$	$\checkmark$
	89 x 71 x 14	√	$\checkmark$	1
	89 x 71 x 16	$\checkmark$	$\checkmark$	$\checkmark$
3	89 x 71 x 18	$\checkmark$	$\checkmark$	$\checkmark$
	89 x 71 x 20	$\checkmark$	$\checkmark$	$\checkmark$
° ° °	89 x 71 x 22	$\checkmark$	1	1
89	89 x 71 x 25	V	$\checkmark$	$\checkmark$
	89 x 71 x 30	V	$\checkmark$	1
	72 x 42 x 14	1	$\checkmark$	$\checkmark$
	72 x 42 x 16	√	$\checkmark$	1
42-72-114-25	72 x 42 x 18	√	$\checkmark$	1
A* 14~25	72 x 42 x 20	√	$\checkmark$	1
	72 x 42 x 22	√	$\checkmark$	1
	72 x 42 x 25	1	1	1
	20 x 14 x 15	√	$\checkmark$	1
15.	20 x 19 x 15	√	√	√
14	40 x 14 x 15	√	√	√
20	40 x 19 x 15	√	√	√
40 /9	55 x 19 x 15	√	 √	√
	65 x 25 x 22	√	√	√
Oracle .	65 x 40 x 22	√	 √	√
		-	•	•



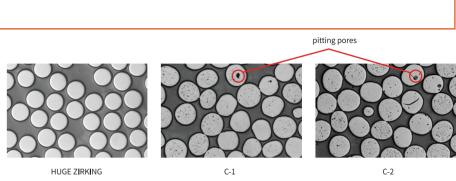
PMMA BLOCK 08





### **High Strength**

These pitting pores will weaken strength and lifetme of the restoratons. With Zirking Zirconia Block low reject rate is warranted. It polishes perfectly without splinter.

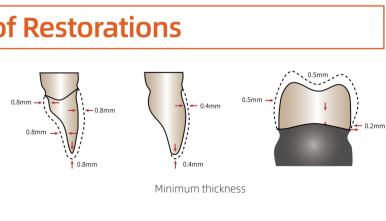


### **Minimized Risk**

Each batch of the raw material is tested for radioactivity and heavy metal, before production of Zirking Zirconia Block (Premium), to ensure the safety and hypoallergenic.

### **Ultra-thin Thickness of Restorations**

Very detailed and realistic crown, bridge and abutment can be made from Zirking Zirconia Block (Silver), due to the steady quality from the raw material.

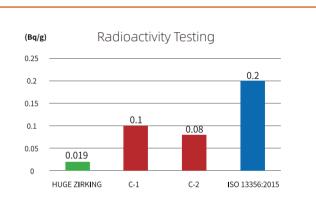


### Zirking

### Zirconia Block (Premium) Made of 100% Tosoh Powder

### **Excellent Color Stability due to High Stability of Raw Material**

\* The particle cross section comparison of the raw material under electron \*





White & 16 A-D classical shades

### • High Translucency (HT)

#### **Recommend Applications**

Full Contour Crown, Bridge, Cantilever Bridge, Inlay Bridge, Maryland Bridge, Telescopic Crown

### **Product Features**

- Reproduce shades perfectl
- Full contour restoration for anterior and posterior areas
- High strength with attractive translucency
- Adaptation to natural teeth

#### **Technical Data**

Translucency	41%
Flexural Strength (3-point)	1100Mpa
Density	>3.27 g/cm <sup>3</sup>
Sintered Density	6.08g/cm <sup>3</sup>
Chemical Solubility	<100ug/cm <sup>2</sup>
Radioactivity	0.019Bq/g
CTE	(10.5±0.5) x 10 <sup>-6</sup> k <sup>-1</sup>
Vickers Hardness HV 10	1250 HV10
Sintering Temperature	1450 °C

### • High Strength (HS)

#### **Recommend Applications**

Copying, Abutment, Bridge, Cantilever Bridge, Inlay Bridge, Maryland Bridge, Telescopic Crown

#### **Product Features**

- Opaque framework, the suitable option for coping& abutment
- Highest strength up to 1400Mpa
- Good fracture resistance
- Mills and polishes easily

#### **Technical Data**

Translucency	35%
Flexural Strength (3-point)	1400Mpa
Density	>3.1 g/cm <sup>3</sup>
Sintered Density	6.08g/cm <sup>3</sup>
Chemical Solubility	<100ug/cm <sup>2</sup>
Radioactivity	0.019Bq/g
CTE	(10.5±0.5) x 10 <sup>-6</sup> k <sup>-1</sup>
Vickers Hardness HV 10	1250 HV10
Sintering Temperature	1500 °C



Shades available: White



### • Anterior Translucency (AT)

- Excellent alternative to lithium disilicate with double strength

White & 16 A-D classical shades

### • Multi-layered High Translucency (MHT)

#### **Recommend Applications**

Crown, Bridge, Cantilever Bridge, Maryland Bridge, Veneer, Inlay & Onlay

#### **Product Features**

- Natural tooth esthetic
- Time-saving and easy processing
- Excellent translucency, for A Light is 36% for A Dark is from 27% to 34%

#### **Technical Data**

Flexural Strength (3-point)	1100Mpa
Density	>3.3g/cm <sup>3</sup>
Sintered Density	6.08g/cm <sup>3</sup>
Chemical Solubility	<100ug/cm <sup>2</sup>
Radioactivity	0.019Bq/g
CTE	(10.5±0.5) x 10 <sup>-6</sup> k <sup>-1</sup>
Vickers Hardness HV 10	1250
Sintering Temperature	<b>1450</b> °C

#### **Recommend Applications**

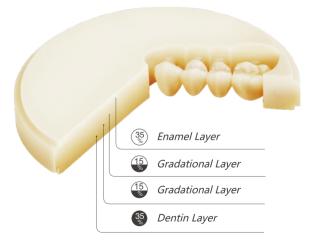
Crown, 2-3 Unit Bridge, Telescopic Crown, Veneer

#### **Product Features**

- Extremely high translucent
- High aesthetics, natural look of teeth

### **Technical Data**

49%
700Mpa
>3.27g/cm <sup>3</sup>
6.05g/cm <sup>3</sup>
<100ug/cm <sup>2</sup>
0.019Bq/g
(10.2±0.5) x 10 <sup>-6</sup> k <sup>-1</sup>
1250 HV10
<b>1450</b> °C



Shades available: A Light, A Dark

### Zirconia Block (Prime) •

### High Translucency (HT)

#### **Recommend Applications**

Crown, 2-4 Unit Bridge, Cantilever Bridge, Inlay Bridge, Maryland Bridge, Telescopic Crown

#### Shades Available

White & 16A-D classical shades

#### Technical Data

Light Translucency	41%
Flexural Strength	>1100(Mpa)
Density After Sintering(g/cm <sup>3</sup> )	≥6.0g/cm <sup>3</sup>
CTE(20-500 <sup>°</sup> C)	(10.5 ± 1.0) x 10 <sup>-6</sup> k <sup>-1</sup>
Chemical Solubility After Sintering(µg/cm²)	<100
Radioactivity(Bq/g)	<0.1

### High Strength (HS)

#### **Recommend Applications**

Coping, 2-4 Unit Bridge, Cantilever Bridge, Inlay Bridge, Maryland Bridge, Telescopic Crown

#### **Shades Available**

White

#### Technical Data

Light Translucency	35%
Flexural Strength	>1400(Mpa)
Density After Sintering(g/cm <sup>3</sup> )	≥6.0g/cm³
CTE(20-500 <sup>°</sup> C)	(10.5 ± 1.0) x 10 <sup>-6</sup> k <sup>-1</sup>
Chemical Solubility After Sintering(µg/cm²)	<100
Radioactivity(Bq/g)	<0.1



### Anterior Translucency (AT)

#### **Recommend Applications**

Crown, less than 3 unit Bridge Inlay Veneer

### Shades Available

White

#### **Technical Data**

Sintered density	≥6.0g/cm <sup>3</sup>
Bending Strength	≥600MPa (Av.)
Transmittance	49%
Sintering temperature	Recommend1450

### Multilayer High Translucency (MHT)

**Recommend Applications** Crown, Bridge Inlay Veneer

#### Shades Available

16A-D classical shade

### **Technical Data**

Sintered density	≥6.0g/cm³
Bending Strength	≥900MPa (Av.)
Transmittance	23%-36%
Sintering temperature	1400-1580°C, re



### Prime Line for Economical Choice



O°C





ecommend 1450°C



# **GM** Gradient Multilayer Zirconia Block

Gradient Multilayer provide you the ultimate aesthetic experience



### **Seamless Gradient Natural Aesthetics**

Seamless gradient to make the color change smoothly from teeth neck to cut end. HUGE 3D Multilayer Zirconia provide you natural aesthetics of teeth.

### 2 **Translucency Gradient Bionic Transparency**

From 47.5% transparency of cut end to 44% of tooth neck, unique gradient achieve life-like texture.

### 3

### **Flexural Strength Gradient Comfort and Strength**

The flexural strength shows gradient from 700Mpa to 1060Mpa in order to protect opposing dentin by lower strength meanwhile ensure the strength in occlusion.

### Seamless Gradient, natural and artistic Easy to operate, stable and efficient

- Flexural Strength: 700-1060Mpa
- **Translucency:** 44-47.5%
- Shades Available: 16 Classic colors from A1 to D4

\* HUGE Dental provide both Premium Series and Prime Series Gradient Multilayer Zirconia Block \*

### Casting Wax •

### Indication

To fabricate male mold for oral hard and soft tissue or restoration model

### **Product Features**

- Natural tooth esthetic
- Time-saving and easy processing
- Excellent translucency, for A Light is 36% for A Dark is from 27% to 34%

#### **Technical Data**

Density	0.89-0.93g/cm <sup>3</sup>
Drop Melting Point	116 C
Shore Hardness	50-60Shore D

### **Product Compatibility**

SYSTEM	DIMENSION	РАСК	SHADE	WAX DISC
	Ф98 x 10(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
8 <sup>96</sup> (	Ф98 x 12(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
8. 0 <sup>93.5</sup>	Ф98 x 14(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
G	Ф98 x 16(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
	Ф98 x 18(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
	Ф98 x 20(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
	Ф98 x 22(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
	Ф98 x 25(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
OPEN SYSTEM	Ф98 x 30(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
	Ф95 x 10(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
\$95	Ф95 x 12(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
	Ф95 x 14(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
	Φ95 x 16(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
	Ф95 x 18(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
	Ф95 x 20(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
	Ф95 x 22(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
Z-95MM SYSTEM	Ф95 x 25(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
	89 x 71 x 13(mm)	1 DISC/PACK	BLUE/WHITE	$\checkmark$
→   (/ )				
89	89 x 71 x 20(mm)	1 DISC/PACK	BLUE/WHITE	V
A-71MM SYSTEM			,	





Shades available: Blue, White



Huge Scanner	Parameters
Scanning technology	Video scanning
Size (L*W*H)	216mmx40mmx36mm
Weight	246g
Tip	Multiple specifications, repeated usage
Specification (L*W*H)	83.4x19.6x14.6mm
Window Size	17x15mm
Scanning Depth	15mm
Data Format	STL, PLY, PTY
Interface	USB 3.0
Full Dentition Scanning Speed	< 5 min

### ACCURATE, PRECISION AND FAST

Bring an unprecedented oral treatment experience

### HUGE SCANNER

#### · SHORT TREATMENT PERIOD

HIIGE

Data can be obtained directly from the mouth, 3 minutes to take the model, and 1 hour to complete the denture restoration.

#### · HIGH DATA ACCURACY

High accurate scanning data, and it is convenient for date storage and trace.

#### • COMFORTABLE

Short mouth opening time, no abnormal sensation in the mouth, and available to be paused at any time.

#### • INFORMATIVE

The visual digital model can help analyze and simulate intraoral changes in time, such as tooth wear, gingival recession, etc.

### TRADITIONAL IMPRESSION

#### · LONG TREATMENT CYCLE

It takes 5-10 minutes for impression and usually takes 1-2 weeks to complete the dental restoration. The rework rate is high.

#### · LOW DATA ACCURACY

Indirectly data acess through multiple processes, e.g. impression, reversal, and scanning, which reduces the accuracy of data.

#### · UNCOMFORTABLE

Long patient's mouth opening time impacts impression taking experience, and the abnormal sensation will lead to nausea and vomiting.

#### · LESS INFORMATION

It is impossible to observe the dynamic changes based on the single static model data.



### MICRO DEVICE, COMPREHENSIVE VISION, COMFORTABLE EXPERIENCE

Portable pen-type design



17



AI technology improves intelligent scanning experience.



A variety of scanning tips to meet various complex cases.



Fast scanning speed, easy to use.

Clear cervical margin,

vivid color and high

precision.

Portable and micro device, easy to operate.



Powder free for true color scanning.

# **Vinci3D Printer**

Ideal for precise and high-speed dental printing.



### **ADVANTAGES**

- Widely used in 3D dentistry
- Large print format
- High-speed printing
- High printing accuracy
- Not only for lab but also for dental clinic
- Simple operation, saving materials
- Excellent value for money







**Teeth Model** 

**Ortho Model** 

Guide



Specification	Building envelop (W×L×H)
	Accuracy
	Layer thickness
	Light source
	Manufacturing speed





### **Available Material**





Gingiva (coming soon)



Cast

### **HUGE** DLP Model **Printing Solution**

Available 3D printer and related printing material promises the high precision and speed, allows doctors to easily make a stable and reliable cases meeting the demands of immediate chair-side restoration.

Approx. 144×81×150 mm < 50 µm 20-100 µm 405 nm UV LED 20-40 mm/h







### **The Leading Dental Supplier**

HUGE Dental was the first multi-layered Synthetic Polymer Teeth manufacturer in China, and since then, HUGE has been dedicating to be the leading supplier of dental material in the world.

To provide professional dental products and services, Shandong Huge Dental Material Corporation (SHD for short) that integrates R&D, manufacturing, sales of dental products and services, was founded in 2014 in Rizhao Shandong, China, the United Nation's Best Cities for Residences.

Until 2017, there are three R&D centers functioning independently in Beijing, Qingdao and Rizhao, China. Over 400 employees in HUGE are making contributions each day, to our clients in China and abroad.

The company is ISO13485 certified and the products are listed or registered with CFDA(China), CE(EU), FDA(USA), MDL and MDEL(Canada), JIS(Japan) and many other countries. Due to the delicate sales network HUGE had built, dental professionals in all the major cities of China are able to acquire HUGE products, and over 50 million population are benefited. In the international market, people from 80+ countries/regions are using HUGE products. There is nothing in the world would stop HUGE committing to improving dental technique and reducing the cost of dental care.

### **MEMORABILIA**

### • 2006-2010

HUGE was restructured refreshed, dedicating into high-quality dental material R&D, and the CAD/CAM tooth molding center was established, 8 ranges of teeth with different mould design that can be applied to all races worldwide were launched; HUGE RIZHAO manufacturing center was set up and became one of the largest synthetic polymer teeth manufacturers in China; HUGE products were exported to 30+ countries;

### 2011-2016

National Certification of New Hi-tech Enterprise was awarded to HUGE. The company was listed with NEEQ in 2015, and in the same year, HUGE acquired Enjoy Laboratory, which is one of the most advanced Glass Ionomer Cement material research and development lab in China.

Many newer dental products such as PMMA BLOCK, Zirconia Block, Light Curing Individual Tray, PERFIT A Silicone Impression Material and Glass Ionomer Cement were launched, HUGE products were exported to 80 countries; KAIJING synthetic polymer teeth and PERFIT A Silicone Impression Material are one of the most popular brands that widely used in the Chinese market;

### • 2017-2018

HUGE R&D building started to work; HUGE India company started to work; Invisible Orthodontic Appliance was launched; 30%+ increase of yearly revenue continued;

### • 2019-2021

Many more new products for adhesive, direct restorations and indirect restorations are to be launched; Digital full denture solution are available and the new series of synthetic polymer teeth improves the hardness over 40HV0.2.



