



**rainbow™**  
**Dental Lab System**

**Dentium**  
For Dentists By Dentists

**Dentium**  
For Dentists By Dentists

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rainbow™




**Block System**

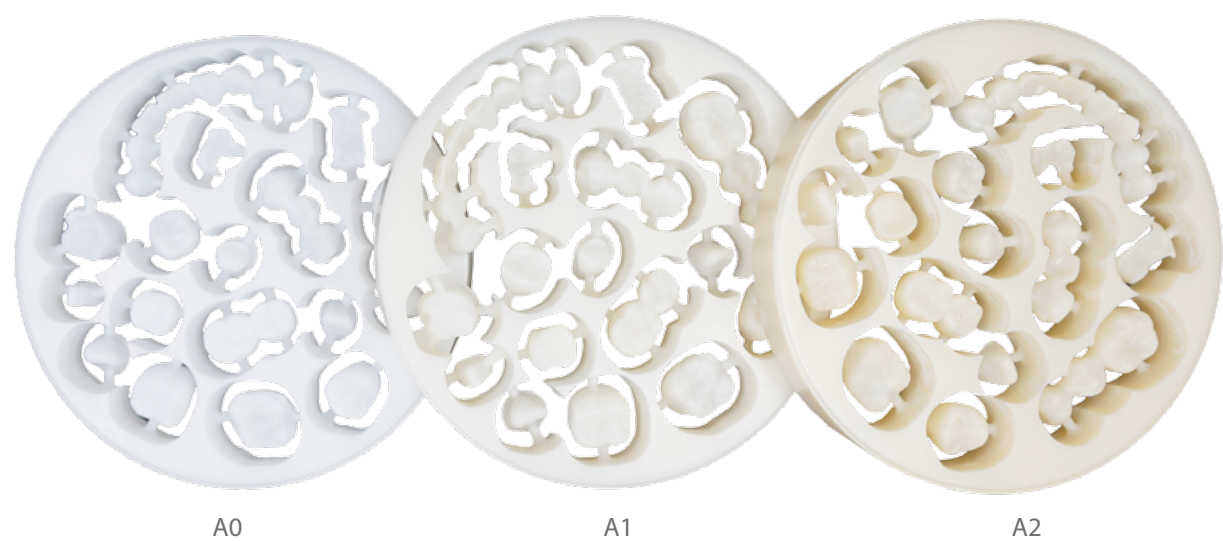
rainbow™  
Block System

Dentium has created its own zirconia block in various shades and flexural strengths to reproduce as closely as possible, the natural human tooth. Dentium has gone even further by developing solutions and substances to provide users the control over the aesthetics in implant restorations.

rainbow™ Block  
Indications

● : Recommend    △ : Available

Case	rainbow™ High Shine Block	rainbow™ Shine Block	rainbow™ Shade Block	rainbow™ LS Block	rainbow™ LS Pressing
Full - contour single crowns					
 Anterior (Woman)	●	△	△	●	●
 Anterior (Man)	△	●	△	●	●
 Posterior	△	△	●	●	●
Full - contour bridges	△	△	△	-	-
Single crowns frameworks	△	△	△	-	-
Bridge frameworks	△	△	△	-	-
Inlays, onlays	-	-	-	●	●
Veneers	-	-	-	△	△

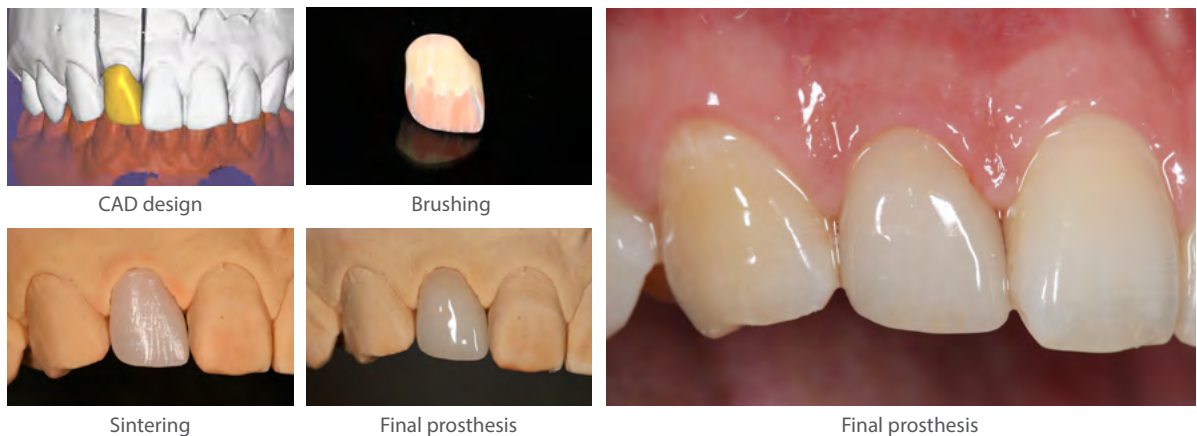


# rainbow™ High Shine Block

**Semi-transparent block for anterior application for superior esthetics**

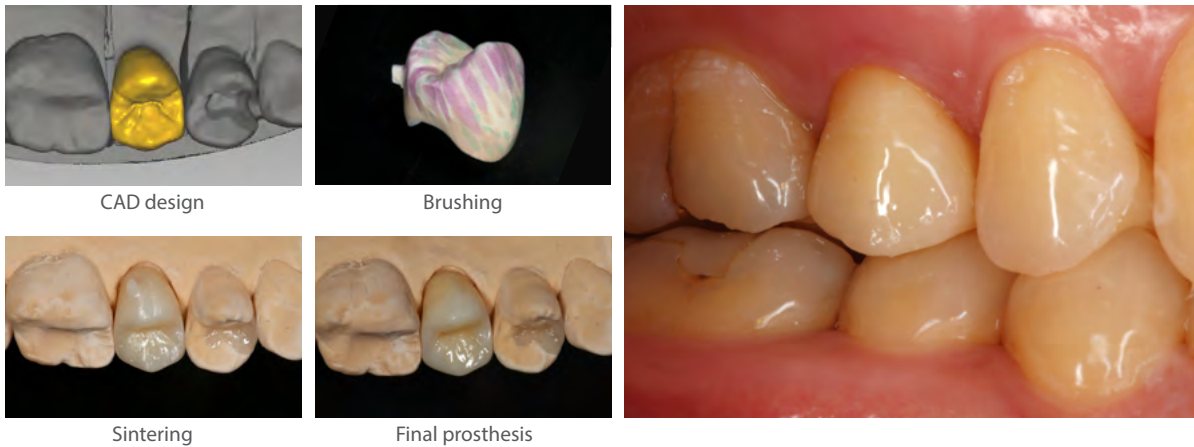
Transparency is an important criterion when it comes to choosing the CAD/CAM block for anterior prosthesis. The main advantage of the rainbow™ High Shine is its transparency, making it a favorable material to use to achieve anterior esthetics. It is available in both disk and step type in commonly used shades of A0, A1 and A2.

rainbow™ High Shine Block Clinical Case 1 - Full Zirconia

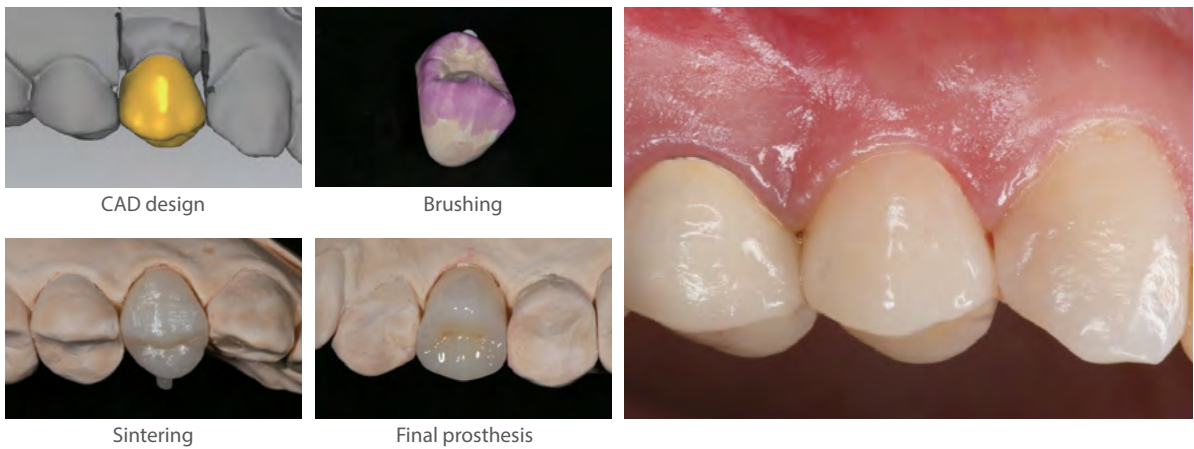




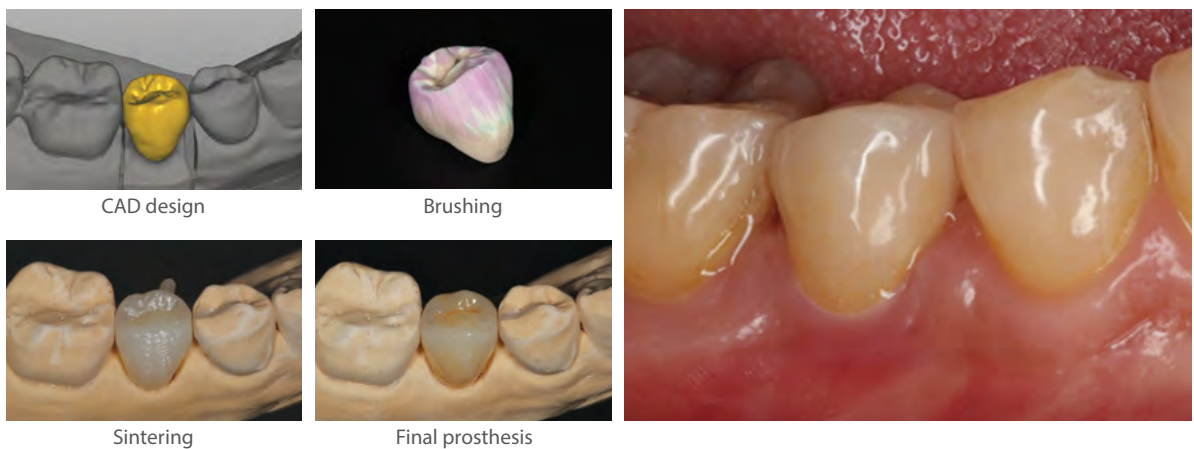
rainbow™ High Shine Block Clinical Case 2 - Full Zirconia

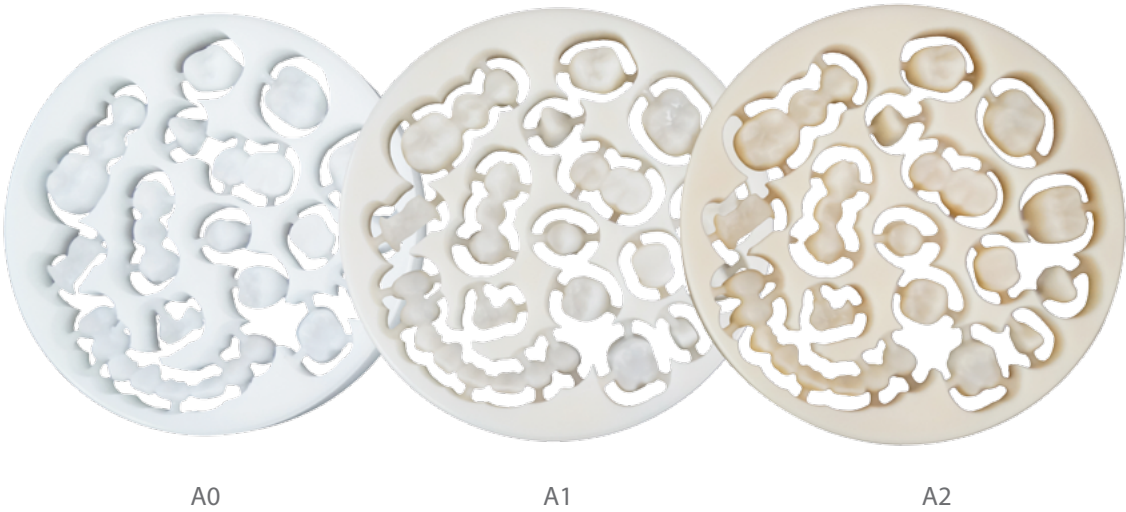


rainbow™ High Shine Block Clinical Case 3 - Full Zirconia



rainbow™ High Shine Block Clinical Case 4 - Full Zirconia





# rainbow™ Shine Block

**Semi-transparent block for anterior application for superior esthetics**

- Clearer and more transparent than the traditional opaque and translucent blocks
- Higher in strength than the lithium disilicate product group
- Product available in shades A0, A1 and A2 for best esthetic result

**rainbow™ Shine Block Clinical Case 1 - Full Zirconia**



CAD design



Brushing



Sintering



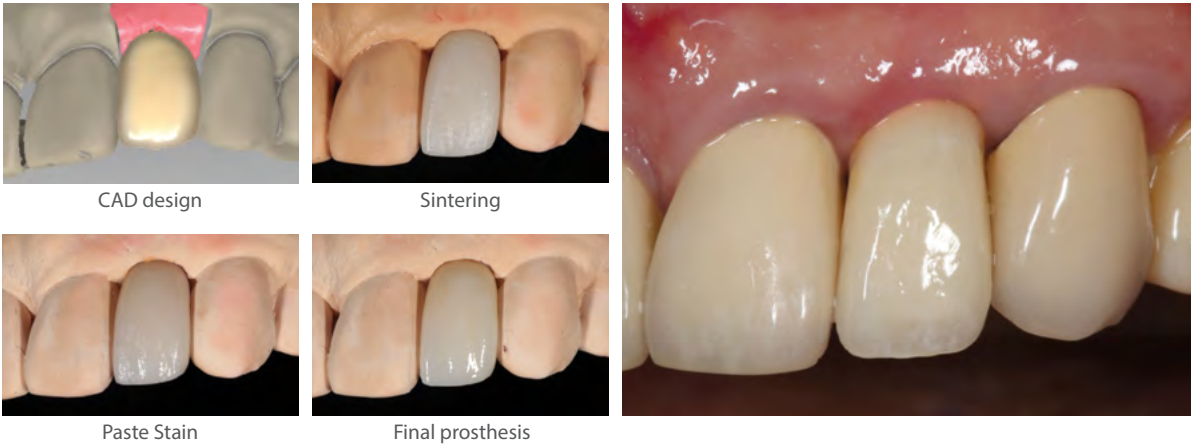
Final prosthesis



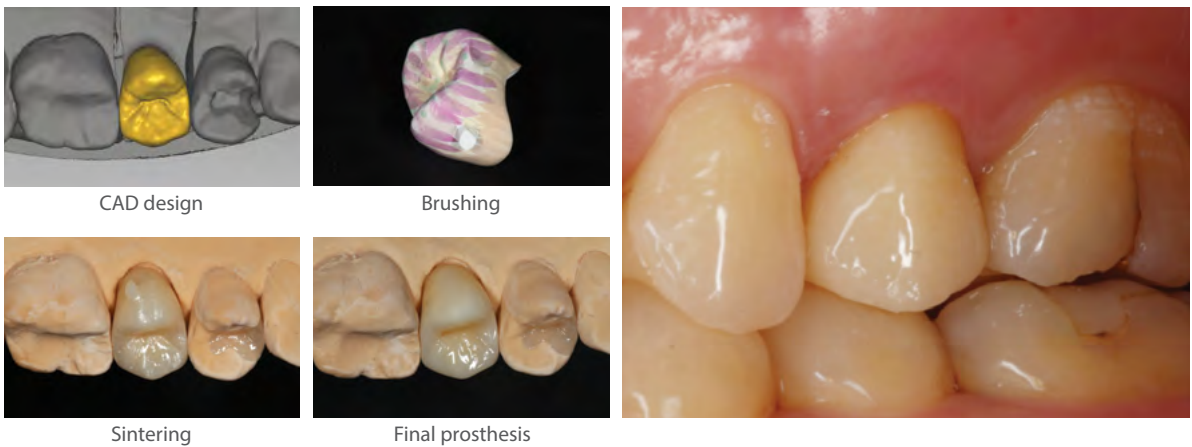
Final prosthesis



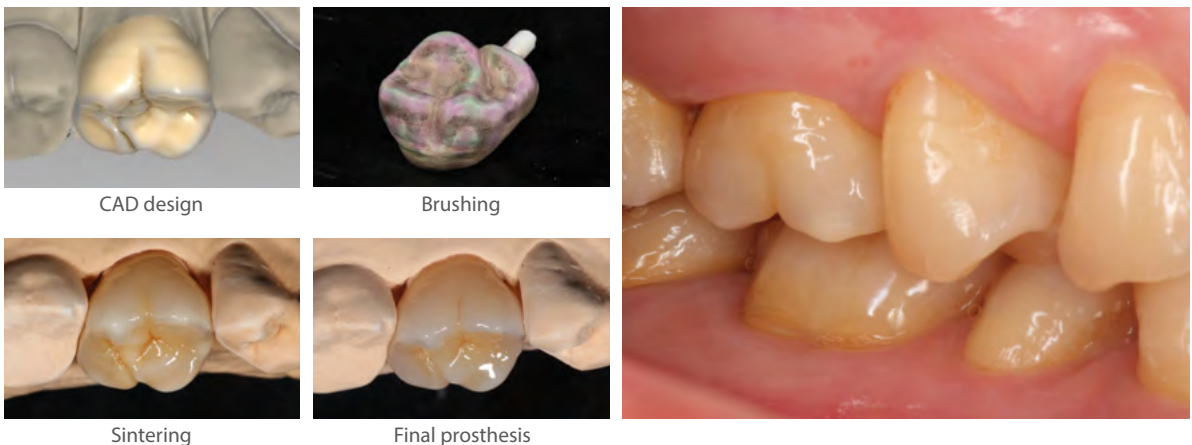
rainbow™ Shine Block Clinical Case 2 - Full Zirconia



rainbow™ Shine Block Clinical Case 3 - Full Zirconia



rainbow™ Shine Block Clinical Case 4 - Full Zirconia





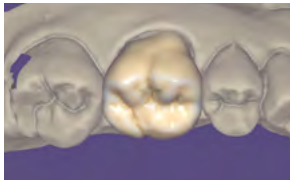
A0.5

A2

# rainbow™ Shade Block

- Original color of the blocks eliminates the need for additional dipping
- Uniform color tone is preserved even after occlusal articulation
- Entire “Vita A” shades are expressible with simplified constitution of A0.5 and A2 blocks

## rainbow™ Shade Block Clinical Case 1 - Full Zirconia



CAD design



Brushing



Sintering

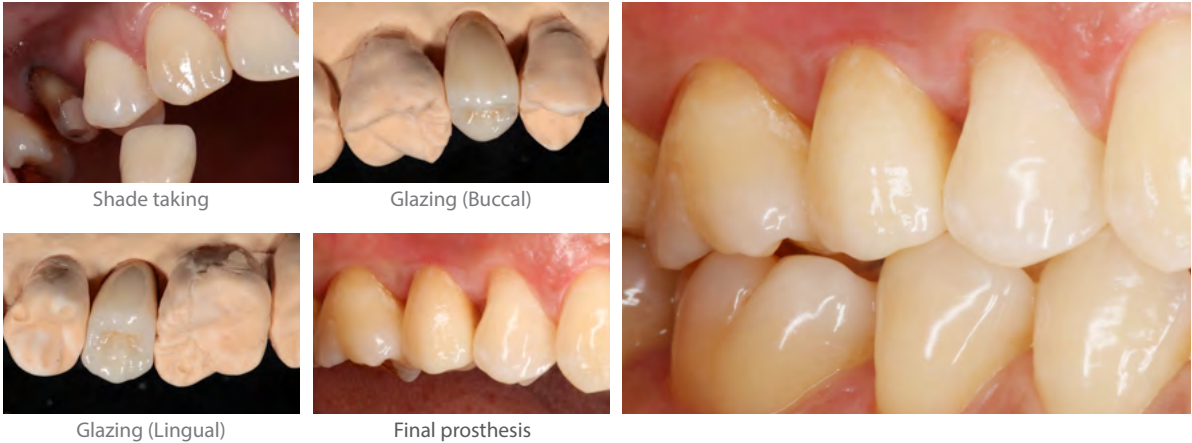


Final

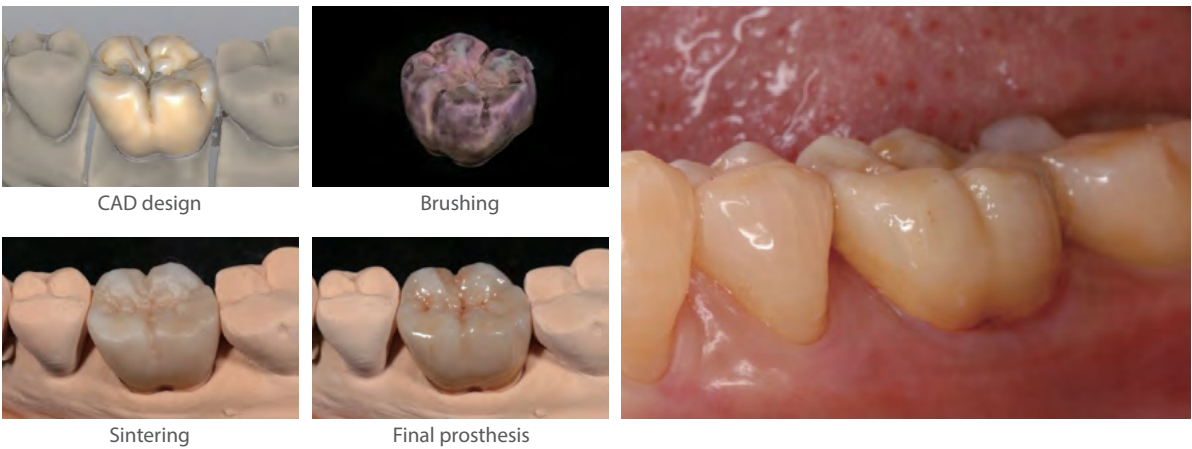


Final prosthesis

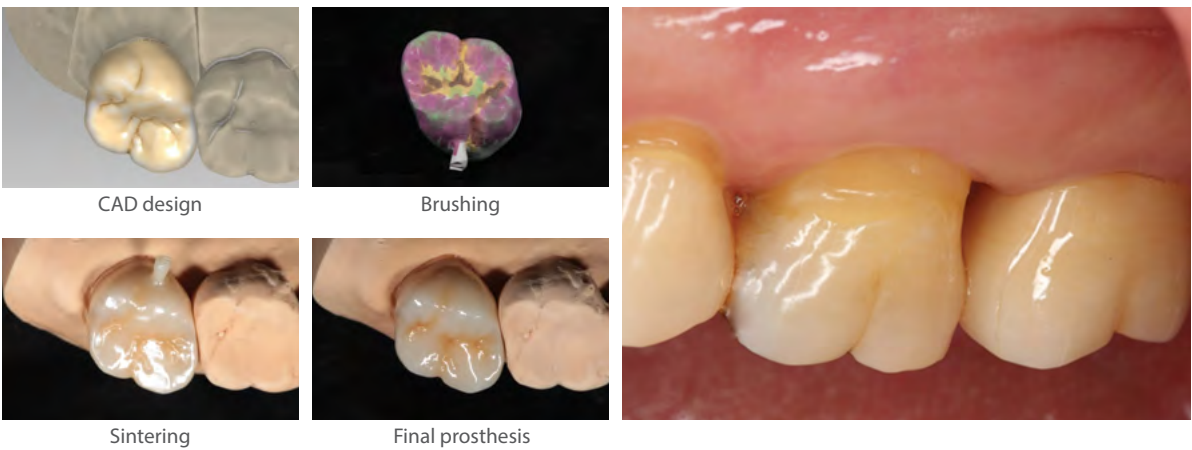
rainbow™ Shade Block Clinical Case 2 - Full Zirconia



rainbow™ Shade Block Clinical Case 3 - Full Zirconia



rainbow™ Shade Block Clinical Case 4 - Full Zirconia



rainbow™ Shine Block

Type	Diameter (mm)	Shade	Height (mm)	Art. No.	Type	Diameter (mm)	Shade	Height (mm)	Art. No.
Disk	Ø98	A0	10	SH9810AO	Step	Ø98	A0	12	SH9812WAO
			12	SH9812AO				14	SH9814WAO
			14	SH9814AO				16	SH9816WAO
			16	SH9816AO				18	SH9818WAO
			18	SH9818AO				20	SH9820WAO
			20	SH9820AO				22	SH9822WAO
			22	SH9822AO				24	SH9824WAO
			24	SH9824AO			A1	12	SH9812WA1
		A1	10	SH9810A1				14	SH9814WA1
			12	SH9812A1				16	SH9816WA1
			14	SH9814A1				18	SH9818WA1
			16	SH9816A1				20	SH9820WA1
			18	SH9818A1				22	SH9822WA1
			20	SH9820A1				24	SH9824WA1
			22	SH9822A1			A2	12	SH9812WA2
			24	SH9824A1				14	SH9814WA2
		A2	10	SH9810A2				16	SH9816WA2
			12	SH9812A2				18	SH9818WA2
			14	SH9814A2				20	SH9820WA2
			16	SH9816A2				22	SH9822WA2
			18	SH9818A2				24	SH9824WA2
			20	SH9820A2					
			22	SH9822A2					
			24	SH9824A2					

rainbow™ High Shine Block

Type	Diameter (mm)	Shade	Height (mm)	Art. No.	Type	Diameter (mm)	Shade	Height (mm)	Art. No.
Disk	Ø98	A0	10	AT9810AO	Step	Ø98	A0	12	AT9812WAO
			12	AT9812AO				14	AT9814WAO
			14	AT9814AO				16	AT9816WAO
			16	AT9816AO				18	AT9818WAO
			18	AT9818AO				20	AT9820WAO
			20	AT9820AO				22	AT9822WAO
			22	AT9822AO				24	AT9824WAO
			24	AT9824AO			A1	12	AT9812WA1
		A1	10	AT9810A1				14	AT9814WA1
			12	AT9812A1				16	AT9816WA1
			14	AT9814A1				18	AT9818WA1
			16	AT9816A1				20	AT9820WA1
			18	AT9818A1				22	AT9822WA1
			20	AT9820A1				24	AT9824WA1
			22	AT9822A1			A2	12	AT9812WA2
			24	AT9824A1				14	AT9814WA2
		A2	10	AT9810A2				16	AT9816WA2
			12	AT9812A2				18	AT9818WA2
			14	AT9814A2				20	AT9820WA2
			16	AT9816A2				22	AT9822WA2
			18	AT9818A2				24	AT9824WA2
			20	AT9820A2					
			22	AT9822A2					
			24	AT9824A2					

rainbow™ Shade Block

Type	Diameter (mm)	Shade	Height (mm)	Art. No.	Type	Shade	Diameter (mm)	Height (mm)	Art. No.
Disk	Ø98	A0.5	10	TS98 <b>10</b> A05	Step	Ø98	A0.5	12	TS98 <b>12</b> A05W
			12	TS98 <b>12</b> A05				14	TS98 <b>14</b> A05W
			14	TS98 <b>14</b> A05				16	TS98 <b>16</b> A05W
			16	TS98 <b>16</b> A05				18	TS98 <b>18</b> A05W
			18	TS98 <b>18</b> A05				20	TS98 <b>20</b> A05W
			20	TS98 <b>20</b> A05				22	TS98 <b>22</b> A05W
			22	TS98 <b>22</b> A05				24	TS98 <b>24</b> A05W
			24	TS98 <b>24</b> A05					
			A2	10				TS98 <b>10</b> A2	A2
		12		TS98 <b>12</b> A2			14	TS98 <b>14</b> A2W	
		14		TS98 <b>14</b> A2			16	TS98 <b>16</b> A2W	
		16		TS98 <b>16</b> A2			18	TS98 <b>18</b> A2W	
		18		TS98 <b>18</b> A2			20	TS98 <b>20</b> A2W	
		20		TS98 <b>20</b> A2			22	TS98 <b>22</b> A2W	
		22		TS98 <b>22</b> A2			24	TS98 <b>24</b> A2W	
		24		TS98 <b>24</b> A2					



# rainbow™ LS Block

## A lithium disilicate for CAD/CAM technique

- Excellent transparency and 9 shades (A1, A2, A3, A3.5, A4, B1, B2, B3, B4)
- Excellent flexural strength (>370MPa, 3-point)
- Various indications (Veneer, inlay, onlay, single crown and so on)
- Compatible mandrel-type block for milling machine



## rainbow™ LS Block Firing Parameter for Crystallization

Stand-by temperature B[°C]	Closing time S[min]	Heating rate t1[°C/min]	Firing temperature T1[°C]	Holding time H1[min]	Heating rate t2[°C/min]
403	6:00	90	820	0:10	30

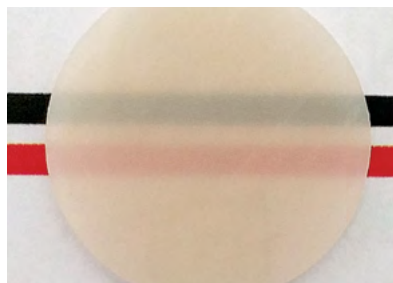
Firing temperature T2[°C]	Holding time H2[min]	Vacuum1 1 <sub>1</sub> [°C]/1 <sub>2</sub> [°C]	Vacuum2 2 <sub>1</sub> [°C]/2 <sub>2</sub> [°C]	Long-term cooling L[°C]	Cooling rate tl[°C/min]
840	7:00	550/820	820/840	700	0

According to the condition of furnace, the firing temperature T2 can be adjusted. If excessive shrinkage occurs, please reduce the T2 by 5~10°C

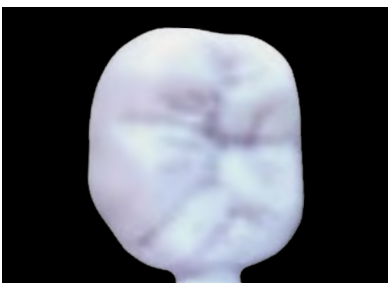
The above schedule is the manufacturer’s recommendation for the optimum prosthesis fabrication. Furthermore, the rate of heat acceleration and the temperature maxima must be adjusted according to the furnace specification and the size of the prosthesis.

## rainbow™ LS Block Order Information

Type	Size(mm)	Shade	Art. No.
Mandrel	10 x 12 x 15	A1, A2, A3, A3.5 A4	LBI12A1, LBI12A2, LBI12A3, LBI12A3.5, LBI12A4
		B1, B2, B3, B4	LBI12B1, LBI12B2, LBI12B3, LBI12B4
	12.5 x 15 x 18.5	A1, A2, A3, A3.5 A4	LBC14A1, LBC14A2, LBC14A3, LBC14A3.5, LBC14A4
		B1, B2, B3, B4	LBC14B1, LBC14B2, LBC14B3, LBC14B4



Transmittance test



Milling



Firing

rainbow™ LS Block Clinical Case

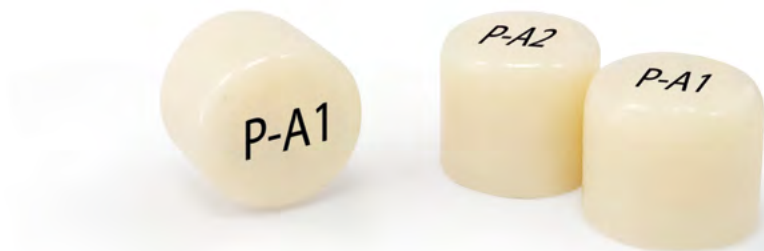


By Dr. Hyun-Sik Park \_ HEIM Dental Clinic

# rainbow™ LS Pressing

## A lithium disilicate ingot for pressing technique

- Excellent esthetic results and flexural strength (>500MPa, 3-point)
- Applicable to diverse cases including veneers, inlays, onlays and single crowns
- Capable of precise marginal fit



## rainbow™ LS Pressing Guide

	Step 1	Step 2	Step 3	Step 4	Step 5
PROCESS	Coping create, connect inject line	> Landfill buried material	> Wax burn-out	> Pressing	> Remove buried material
CONDITION	-	350rpm/1~2.5min. Vacuum100% Dry more than 30min.	850℃ 30 min.~60 min.	915~920℃	1~2bar(=15~30psi) Al <sub>2</sub> O <sub>3</sub> 50-100μm
EQUIPMENT (MATERIAL)	Wax block	Vacuum mixer, Buried material	Furnace	Furnace	Disk, Sand-blast (Al <sub>2</sub> O <sub>3</sub> , bar)

## rainbow™ LS Pressing Condition

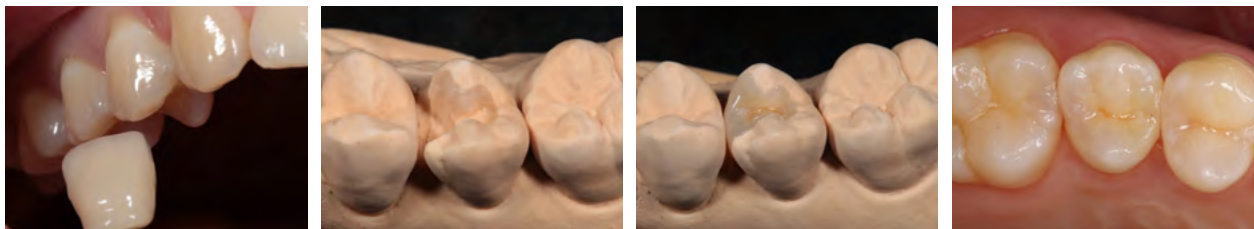
Step	B (Stand by temp.)	t ↗ (The rate of heat acceleration)	T (Holding temp.)	H (Holding time)	E (Cutoff velocity)
Detail Condition	700℃	60℃/min.	915~920℃	15:00min	300μm/min

The above schedule is the manufacturer’s recommendation for the optimum prothesis fabrication.  
Furthermore, the rate of heat acceleration and the temperature maxima must be adjusted according to the furnace specification and the size of the prothesis.

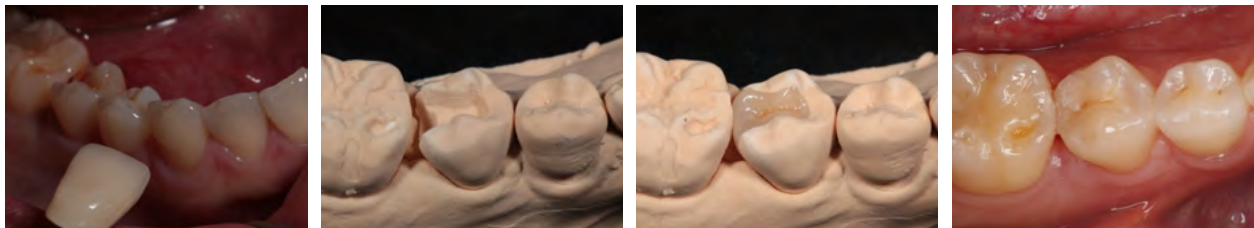
## rainbow™ LS Pressing Order Information

Type	Diameter	Height	Shade	Art. No.
Ingot	Ø12.5mm	10mm	A1, A2, A3, A3.5, A4	PI A1, PI A2, PI A3, PI A3.5, PI A4
			B1, B2, B3, B4	PI B1, PI B2, PI B3, PI B4

rainbow™ LS Pressing Clinical Case 1



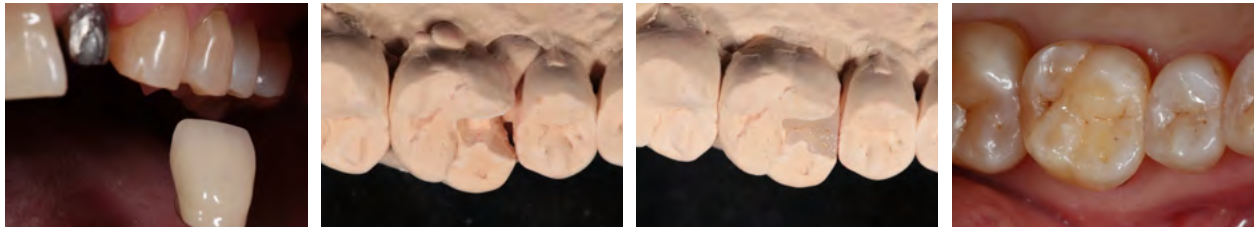
rainbow™ LS Pressing Clinical Case 2



rainbow™ LS Pressing Clinical Case 3



rainbow™ LS Pressing Clinical Case 4



rainbow™

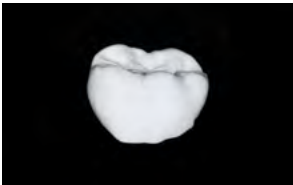
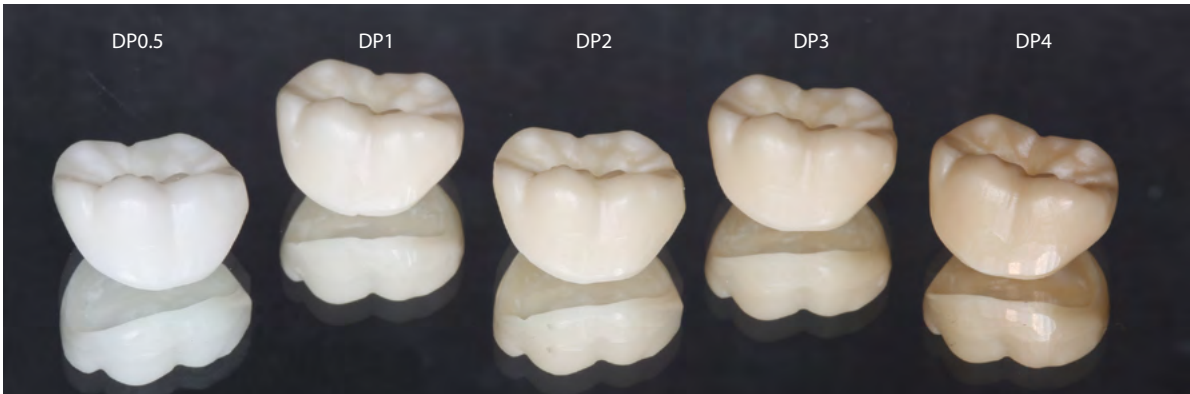
Coloring & Brushing Material





# rainbow™ Coloring Liquid

- Coloring liquid for zirconia prosthesis
- Comprised of the five most commonly used dipping colors
- Deep color penetration to express a natural esthetic



Coping








Dipping



Brushing

## rainbow™ Coloring Liquid Order Information

Type	Color	Art. No.				
Bottle	5	 DP0.5	 DP1	 DP2	 DP3	 DP4



# rainbow™ Brushing Liquid

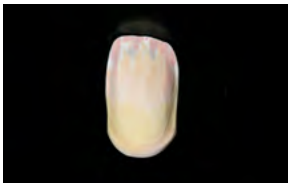
- Fine detailing by implementing the brushing technique
- Solution type and pen type are available to accommodate user's preference
- Comprised of 12 color options (brown, orange, white, grey, pink, violet) to enhance the esthetics of the prosthesis and a diluting solution to adjust the color intensity
- Brushed area is easily distinguishable through the incorporated food dyes



Solution Type



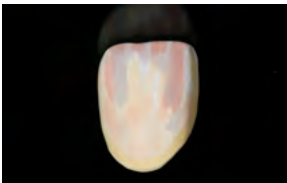
Pen Type



Before



After





















Before



After

## rainbow™ Brushing Liquid Order Information

Type	Color	Art. No.			
Bottle	12	 Brushing Liquid-B	 Brushing Liquid-O	 Brushing Liquid-W	
		 Brushing Liquid-G	 Brushing Liquid-P	 Brushing Liquid-V	
		 Brushing Liquid-BL	 Brushing Liquid-DG	 Brushing Liquid-DB	
		 Brushing Liquid-GV	 Brushing Liquid-WO	 Brushing Liquid-WO (Anti-stain)	
Pen	6	 Brushing Pen-B	 Brushing Pen-O	 Brushing Pen-W	
		 Brushing Pen-G	 Brushing Pen-P	 Brushing Pen-V	

# rainbow™ Paste Stain

### Enhanced uniform application and ease of use

- The paste-like consistency of the product allows for ease of use and makes uniform application possible
- The sintering temperature requirement was lowered to under 800°C to allow application on diverse materials including zirconia and lithium disilicate
- Available in 16 most commonly used shades



### rainbow™ Paste Stain Condition

Start temp.	Dry time	The rate of heat acceleration	Firing temp.	Mooring time	Vacuum
450°C	8 min.	45°C/min.	790°C	1min.	—

The above schedule is the manufacturer’s recommendation for the optimum prosthesis fabrication. Furthermore, the rate of heat acceleration and the temperature maxima must be adjusted according to the furnace specification and the size of the prosthesis.

### rainbow™ Paste Stain Clinical Case 1



### rainbow™ Paste Stain Clinical Case 2



rainbow™ Paste Stain Shade

Shade  
16

PS-Yellow

For darker shade

PS-Brown

For darker shade

PS-yBrown

For darker shade

PS-Orange

For darker shade

PS-Pink

For cervical part

PS-dBrown

For cervical part, fossa

PS-rBrown

For cervical part, fossa

PS-Ocher

Occlusal abrasion part

PS-cBlue

For strong increase of the blue opalescence

PS-sBlue

For little increase of the blue opalescence

PS-Grey

Light Grey - for small changing's in the grey value

PS-White

Pure white to paint on white spots or lucency

PS-Body(A)

Shade A which can be mixed with all Paste Stain

PS-Body(B)

Shade B which can be mixed with all Paste Stain

PS-Body(C)

Shade C which can be mixed with all Paste Stain

PS-Glaze

Transparency which can be mixed with all Paste Stain

rainbow™ Paste Stain Order Information

Type	Art. No.	Contents			
Paste Stain Kit	Paste Stain Kit-S (3g)	<div><div></div>PS-Yellow</div>	<div><div></div>PS-yBrown</div>	<div><div></div>PS-sBlue</div>	
	Paste Stain Kit-M (5g)	<div><div></div>PS-Ocher</div>	<div><div></div>PS-rBrown</div>	<div><div></div>PS-cBlue</div>	
	Paste Stain Kit-L (7g)	<div><div></div>PS-Orange</div> <div><div></div>PS-Brown</div>	<div><div></div>PS-dBrown</div>	<div><div></div>PS-White</div> <div><div></div>PS-glaze</div>	
Paste Stain Body Kit	Paste Stain Body Kit-S (3g)	<div><div></div>PS-Ocher</div>	<div><div></div>PS-Pink</div>	<div><div></div>PS-Body(A)</div>	
	Paste Stain Body Kit-M (5g)	<div><div></div>PS-yBrown</div>	<div><div></div>PS-cBlue</div>	<div><div></div>PS-Body(B)</div>	
	Paste Stain Body Kit-L (7g)	<div><div></div>PS-rBrown</div> <div><div></div>PS-dBrown</div>	<div><div></div>PS-White</div> <div><div></div>PS-glaze</div>	<div><div></div>PS-Body(C)</div> <div><div></div>PS-Grey</div>	
Paste Stain Advanced Kit	Paste Stain Advanced Kit-S (3g)	<div><div></div>PS-Yellow</div>	<div><div></div>PS-yBrown</div>	<div><div></div>PS-sBlue</div>	<div><div></div>PS-Body(A)</div>
	Paste Stain Advanced Kit-M (5g)	<div><div></div>PS-Ocher</div>	<div><div></div>PS-rBrown</div>	<div><div></div>PS-cBlue</div>	<div><div></div>PS-Body(B)</div>
	Paste Stain Advanced Kit-L (7g)	<div><div></div>PS-Orange</div> <div><div></div>PS-Brown</div>	<div><div></div>PS-dBrown</div> <div><div></div>PS-Pink</div>	<div><div></div>PS-White</div> <div><div></div>PS-glaze</div>	<div><div></div>PS-Body(C)</div> <div><div></div>PS-Grey</div>

# rainbow™ Porcelain

## Veneering porcelain for zirconia substructure

- Harmonized coefficient of thermal expansion with zirconia minimizes the possibility of cracking
- Can express a huge diversity of color shade while delivering an excellent esthetic due to the superb opalescent and flourescent effect
- Natural-looking prosthesis production is possible with such a simple build-up procedure
- The special treatment to the powder creates high viscosity even when mixed with just distilled water, offering high user convenience



## rainbow™ Porcelain Physical & Chemical Properties

The results of physical and chemical properties of rainbow™ Porcelain are measured in accordance with ISO and KFDA standard, and suitable to all of these standards.

Properties	Unit	Results	ISO standard
CTE <sup>1)</sup> (25~500℃)	10 <sup>-6</sup> /℃	9.3	± 0.5
Glass transition temperature	℃	570	± 20
Chemical solubility	μg/cm <sup>2</sup>	1.5	≤ 100
Radioactivity	Bq/g	0.0003	≤ 1.0
Average particle size	μm	30±3	-

1) CTE : Coefficient of thermal expansion

## rainbow™ Porcelain Firing Schedule

Firing		Start temp.	Dry time	Heating rate	High temp.	Holding time	Vacuum
Liner firing		500°C	8 min	45°C/min	930°C	1 min	Full
Margin firing		500°C	6 min	45°C/min	940°C	1 min	Full
1 <sup>st</sup> Body firing		500°C	8 min	45°C/min	910°C	1 min	Full
2 <sup>nd</sup> Body firing		500°C	6 min	45°C/min	890°C	1 min	Full
Add-on firing		500°C	6 min	50°C/min	840°C	1 min	-
Glazing	Powder	500°C	6 min	50°C/min	860°C	1 min	-
	Self	500°C	6 min	50°C/min	860°C	1 min	-

### NOTICE

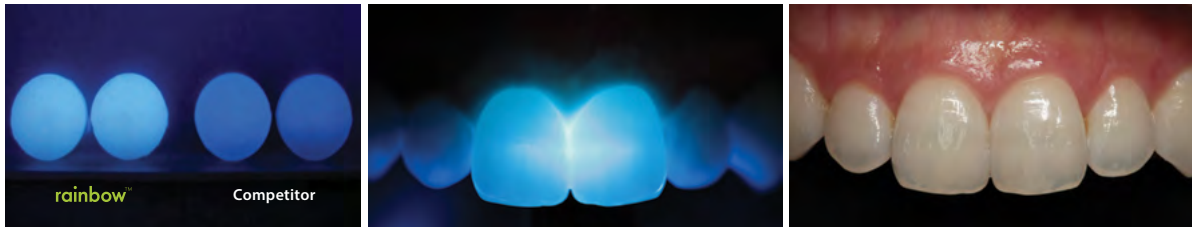
1. This firing schedule is just recommended conditions to obtain a good firing result.
2. The firing temperature and holding time should be changed according to the condition of your porcelain furnace, and the design and number of bridges.
3. The firing temperature of Liner-LNB is 940℃, and it is 10℃ higher than Liner-shade.
4. It is recommended to heat slowly due to low thermal conductivity of zirconia.

rainbow™ Porcelain Opal Effect



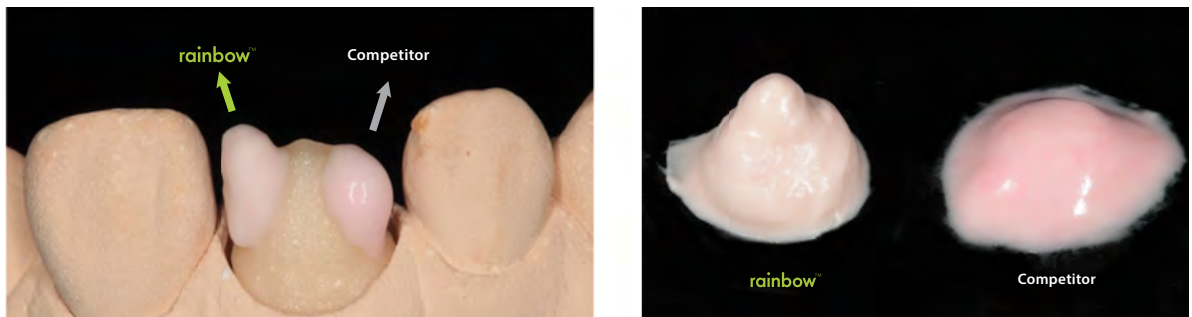
The dental enamel reflects the short wavelength blue portion of light, transmits warm, long wavelength orange-colored light, and glows in the transmitted light almost like amber. This phenomenon is caused by tiny water inclusions and impurities. Opal porcelain of rainbow™ Porcelain shows excellent opalescence effect by nano-crystal precipitated in porcelain.

rainbow™ Porcelain Fluor Effect



The natural fluorescence emanate from deep inside of the tooth. Ultraviolet light, as electromagnetic radiation from the non-visible spectrum of daylight, stimulates this particular form of luminescence. The ceramic compound that is built up in the inside of the crown is also dosed with additional fluorescing material. By adding special fluor-pigment, rainbow™ Porcelain provides an excellent fluorescence effect and in order to achieve strong fluorescence effect, special porcelains such as Fluor-W and Fluor-T are available.

rainbow™ Porcelain Excellent Workability



Thanks to special treatment of rainbow™ Porcelain powder using our own technique; it is easy and convenient for build-up fabrication.

rainbow™ Porcelain Products



**Liner**  
Represents basic shading and enhances the bond strength.  
Includes most fluorescent pigment to increase the fluor effect like natural teeth.



**Opacious Dentin**  
Fills up the insufficient area of pontic or core controls transparency if thickness of dentin is not enough.



**Dentin**  
It is used to make the shape and represent the shade of prosthesis.



**Enamel**  
Porcelain to express the translucent incisal part of teeth.



**Translucent**  
Porcelain to express the more translucency of incisal part.



**Opal Effect**  
Porcelain to express the translucent incisal part of teeth.



**Fluor Effect**  
Porcelain added more fluorescent materials to increase fluor effect.



**Cervical**  
Porcelain to express the deep color of cervical part and sometimes darker shade of dentin porcelain is used.

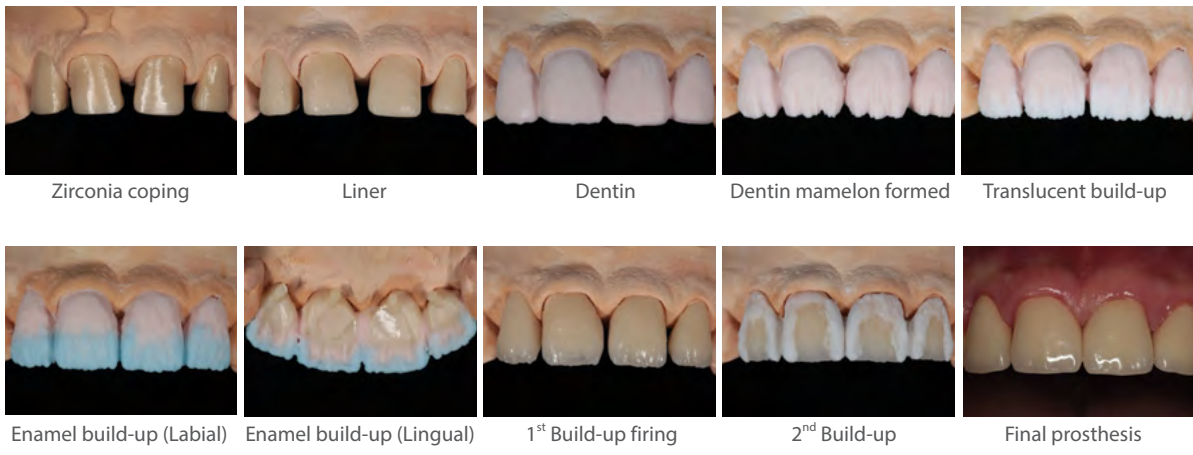
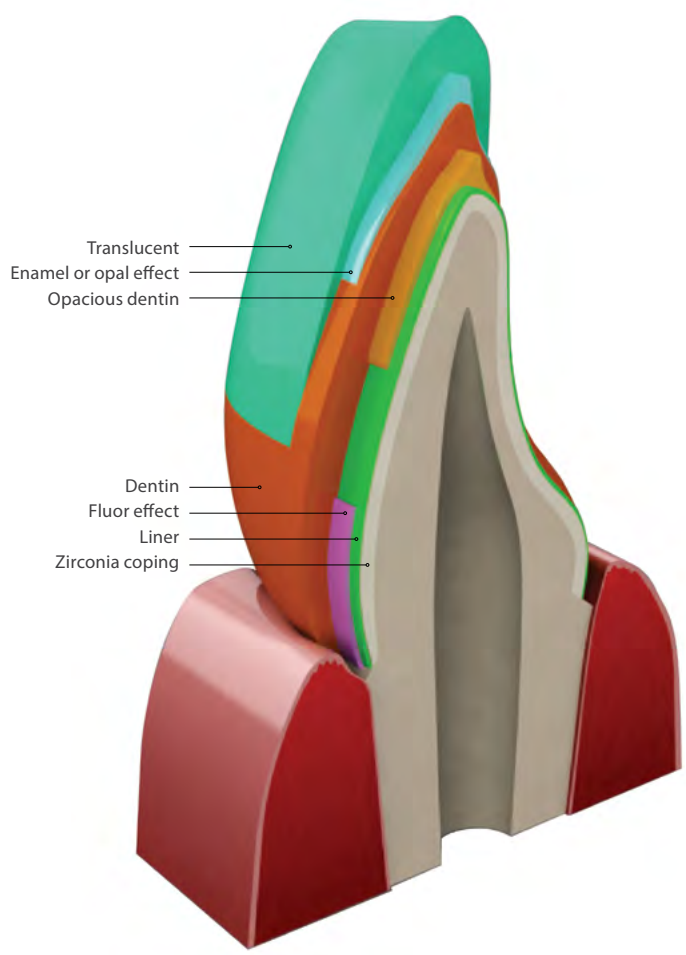


**Margin**  
Porcelain to fit precisely with margin adaptation.  
Controls translucency of margin to enhance esthetics.



**Gum**  
Porcelain to express the color of gum.





rainbow™ Porcelain Shade Combination Table

Shade (VITA Lumin)	A1	A2	A3	A3.5	A4	B1	B2	B3	B4
Liner	LN1	LN2	LN3	LN3	LN5	LN1	LN2	LN3	LN4
Margin	MG1	MG2	MG3	MG3	MG5	MG1	MG2	MG3	MG4
Opacious Dentin	ODA1	ODA2	ODA3	ODA3.5	ODA4	ODB1	ODB2	ODB3	ODB4
Cervical	-	CVA+DA2 (1:2)	CVA+DA3 (1:2)	CVA+DA3.5 (1:1)	CVA	-	CVB+DB2 (1:2)	CVB+DB3 (1:1)	CVB
Dentin	DA1	DA2	DA3	DA3.5	DA4	DB1	DB2	DB3	DB4
Enamel	EN2	EN2	EN3	EN3	EN3	EN1	EN2	EN3	EN3
Opal Effect	OE2	OE2	OE3	OE3	OE3	OE1	OE2	OE3	OE3

Shade	Neutral	Yellow	Orange	Brown	Pink	Blue	Grey	Milky
Translucent	TNT	TYL	TOR	TBR	TPK	TBL	TGR	TML

Shade	Yellow	Orange	Brown	Pink	Blue	Grey	White
Dentin Modifier	DM-YL	DM-OR	DM-BR	DM-PK	DM-BL	DM-GR	DM-WT

Glaze & Stain	GLAZE	ST-Yellow	ST-Ocher	ST-Orange	ST-Brown	ST-yBrown	ST-rBrown	ST-dBrown	ST-Pink
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C1	C2	C3	C4	D2	D3	D4	A00	A0	B00	B0
LN1	LN3	LN5	LN5	LN2	LN4	LN4	LNB	LNB+LN1 (1:1)	LNB	LNB+LN1 (1:1)
MG1	MG3	MG5	MG5	MG2	MG4	MG4	MG1	MG1	MG1	MG1
ODC1	ODC2	ODC3	ODC4	ODD2	ODD3	ODD4	ODW	ODW	ODW	ODW
-	CVC+DC2 (1:2)	CVC+DC3 (1:1)	CVC	CVD+DD2 (1:2)	CVD+DD3 (1:1)	CVD	-	-	-	-
DC1	DC2	DC3	DC4	DD2	DD3	DD4	DA00	DA0	DB00	DB0
EN2	EN3	EN3	EN3	EN2	EN3	EN3	EN1	EN1	EN1	EN1
OE2	OE3	OE3	OE3	OE2	OE3	OE3	OTR	OE1	OTR	OE1

Shade	Light Pink	Normal Pink	Dark Pink
Gum	GLP	GNP	GDP

Shade	White	Trans
Fluor Effect	FLUOR-W	FLUOR-T

Shade	Body	Trans
Add-on	ADD-B	ADD-T

ST-Lilac	ST-sBlue	ST-cBlue	ST-Black	ST-Grey	ST-White	ST-A	ST-B	ST-C
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rainbow™ Porcelain Units

Type	Color	Unit	Contents
Liner	7	50g	LNB, LNT, LN1, LN2, LN3, LN4, LN5
Opacious Dentin	17	50g	ODA1, ODA2, ODA3, ODA3.5, ODA4, ODB1, ODB2, ODB3, ODB4, ODC1, ODC2, ODC3, ODC4, ODD2, ODD3, ODD4, ODW
Dentin	20	50g	DA1, DA2, DA3, DA3.5, DA4, DB1, DB2, DB3, DB4, DC1, DC2, DC3, DC4, DD2, DD3, DD4, DA00, DA0, DB00, DB0
Enamel	3	50g	EN1, EN2, EN3
Translucent	8	50g	TNT, TYL, TOR, TBR, TPK, TBL, TGR, TML
Opal & Fluor Effect	6	50g	OTR, OE1, OE2, OE3, FLUOR-W, FLUOR-T
Dentin Modifier	7	50g	DM-YL, DM-OR, DM-BR, DM-PK, DM-BL, DM-GR, DM-WT
Cervical	4	50g	CVA, CVB, CVC, CVD
Margin	5	50g	MG1, MG2, MG3, MG4, MG5
Gum	3	50g	GLP, GNP, GDP
Add-on	2	50g	ADD-B, ADD-T
Glaze & Stain	18	3g	GLAZE, ST-Yellow, ST-Ocher, ST-Orange, ST-Brown, ST-yBrown, ST-rBrown, ST-dBrown, ST-Pink, ST-Lilac, ST-sBlue, ST-cBlue, ST-Black, ST-Grey, ST-White, ST-A, ST-B, ST-C

rainbow™ Porcelain Special Liquids

Liquid	Unit	Description
Liner Liquid	10ml, 100ml	Liquid for painting liner porcelain uniformly on zirconia coping
Build-Up Liquid	10ml, 100ml	Liquid for body build-up
Margin Liquid	10ml, 100ml	Liquid for making sharp edge of margin
Glazing Liquid	10ml, 100ml	Liquid for painting glaze and stain uniformly

rainbow™ Porcelain Professional Kit

Type	Color	Unit	Contents
Liner	7	10g	LNB, LNT, LN1, LN2, LN3, LN4, LN5
Opacious Dentin	17	10g	ODA1, ODA2, ODA3, ODA3.5, ODA4, ODB1, ODB2, ODB3, ODB4, ODC1, ODC2, ODC3, ODC4, ODD2, ODD3, ODD4, ODW
Dentin	20	10g	DA1, DA2, DA3, DA3.5, DA4, DB1, DB2, DB3, DB4, DC1, DC2, DC3, DC4, DD2, DD3, DD4, DA00, DA0, DB00, DB0
Enamel	3	10g	EN1, EN2, EN3
Translucent	8	10g	TNT, TYL, TOR, TBR, TPK, TBL, TGR, TML
Opal & Fluor Effect	6	10g	OTR, OE1, OE2, OE3, FLUOR-W, FLUOR-T
Dentin Modifier	7	10g	DM-YL, DM-OR, DM-BR, DM-PK, DM-BL, DM-GR, DM-WT
Cervical	4	10g	CVA, CVB, CVC, CVD
Margin	5	10g	MG1, MG2, MG3, MG4, MG5
Gum	3	10g	GLP, GNP, GDP
Add-on	2	10g	ADD-B, ADD-T
Liquid	4	10ml	Liner Liquid (1), Build-Up Liquid (2), Margin Liquid (1)

rainbow™ Porcelain Advanced Kit

Type	Color	Unit	Contents
Liner	4	10g	LNB, LN1, LN2, LN3
Opacious Dentin	4	10g	ODA2, ODA3, ODB2, ODB3
Dentin	4	10g	DA2, DA3, DB2, DB3
Enamel	4	10g	EN2, EN3, OE2, OE3
Translucent	4	10g	TNT, TOR, TBL, TML
Cervical	2	10g	CVA, CVB
Margin	2	10g	MG2, MG3
Glaze & Stain	1	3g	Glaze
Liquid	4	10ml	Liner Liquid (1), Build-Up Liquid (1), Margin Liquid (1), Glazing Liquid (1)

rainbow™ Porcelain Intro Kit

Type	Color	Unit	Contents
Liner	2	10g	LNB, LN2
Opacious Dentin	1	10g	ODA2
Dentin	1	10g	DA2
Enamel	2	10g	EN2, OE2
Translucent	2	10g	TNT, TOR
Glaze & Stain	1	3g	GLAZE
Liquid	2	10ml	Liner Liquid, Build-Up Liquid

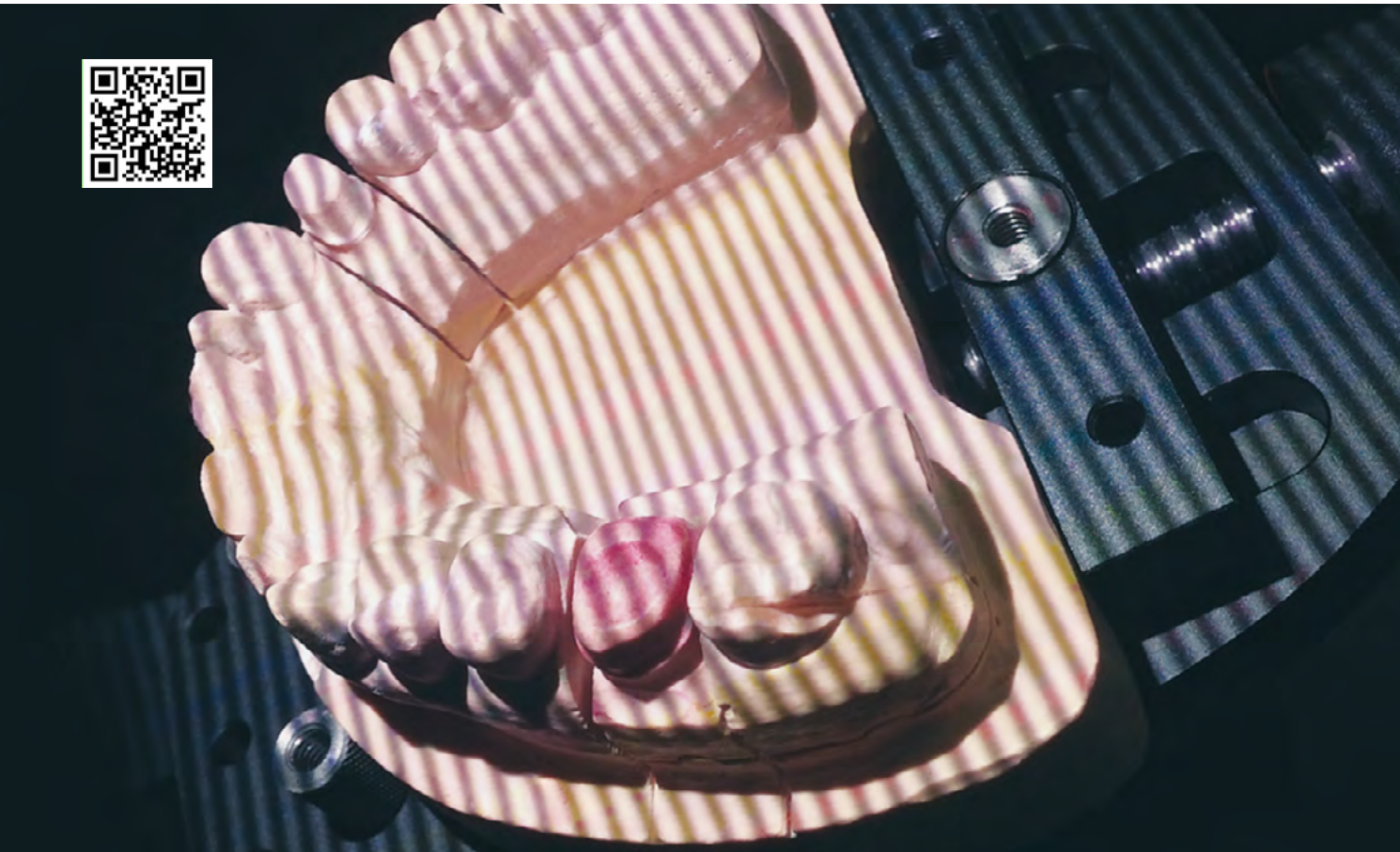
rainbow™ Porcelain Stain Kit

Type	Color	Unit	Contents
Glaze & Stain	18	3g	GLAZE, ST-Yellow, ST-Ocher, ST-Orange, ST-Brown, ST-yBrown, ST-rBrown, ST-dBrown, ST-Pink, ST-Lilac, ST-sBlue, ST-cBlue, ST-Black, ST-Grey, ST-White, ST-A, ST-B, ST-C
Liquid	1	10ml	Glazing Liquid



rainbow™  
**CAD/CAM System**





# rainbow™ Scanner Prime

- 2.0 MP camera resolution
- Super speed USB 3.0 interface
- Structured light tech (Accuracy <10µm)
- Wide scan area & deep depth of scan field
- Articulator compatibility
- White light scanning system
- Convenient scan jig accessory

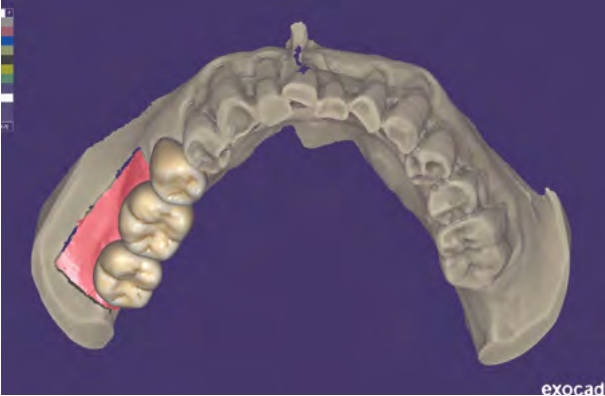
Scan type	White light technology
Camera resolution	2.0 Mega pixels (Twin-Camera)
Scan time	Single: 29 sec, 4-Bridge: 103 sec
Accuracy	≤10µm
Interface	USB 3.0
File format	Open STL
Scan area (W X D X H)	80 X 60 X 60 mm
Dimensions	28 X 40 X 45 cm
Weight	15 kg



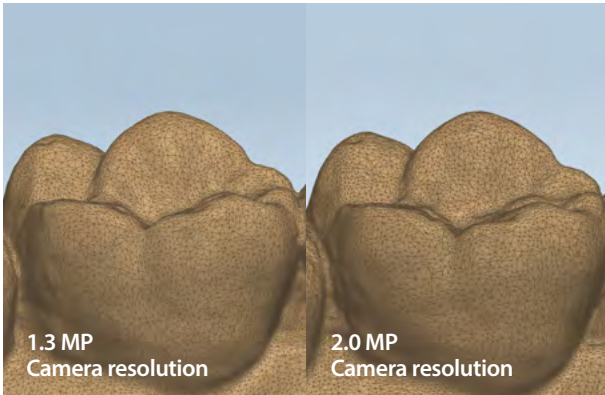
White light scanning



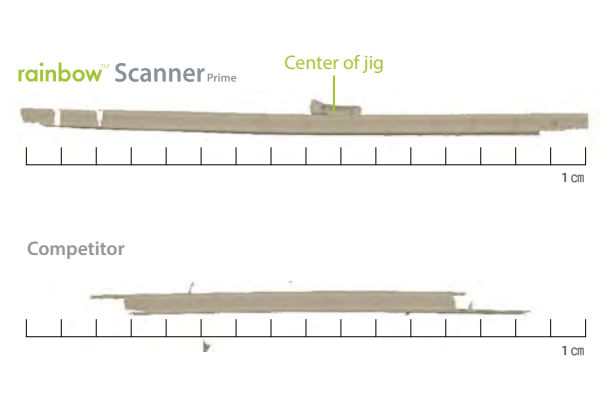
EXOCAD (CAD software)



2.0 MP Camera resolution



Wide scan area & Deep depth of scan field



Convenient scan jig accessory



rainbow™ Scanner offers precise and accurate scanning capability and reliable performance. The doorless entry accessibility makes the setting up of the scan-jig fast and easy. The open STL file format enables compatibility of various CAD software. Increased speed and highly accurate scanning of 3D data are possible due to the perfect synchronization between cameras and pattern projection device, and data processing technology. Dentium's diverse implant system library, as well as other implant systems' library provides convenience of prosthetic design.





# rainbow™ Mill

- Diverse design and precise production with simultaneous 5-axis milling system
- Equipped with a spindle, allowing highly precise and fine machining
- Enhanced convenience with user-focused interface
- Provides space-efficient by intergrated design dust collector

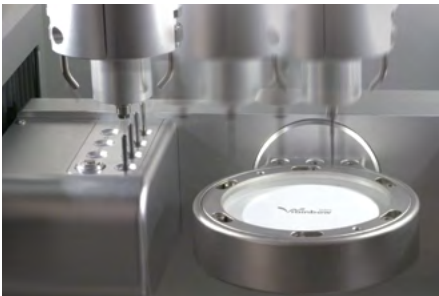
Material	Zirconia, PMMA, Wax
Milling time	Single : 15 Min, 3Br : 45 Min
Control axis	Simultaneous 5-axis
Spindle	60,000 rpm, 250W
Motion drives	All servo motors
Tool posts	7 posts (Automatic changes)
Milling type	Dry processing
Dimensions (W x D x H)	71 x 81 x 170 cm
Weight	280 kg



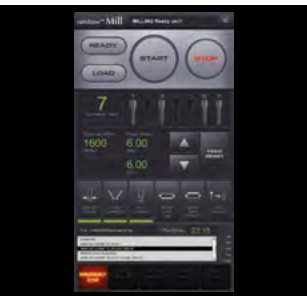
Fast milling speed & Stable milling quality



Automatic tool change & Broken tool detection system



User friendly touch interface



Built-in dust collector



High-precision spindle



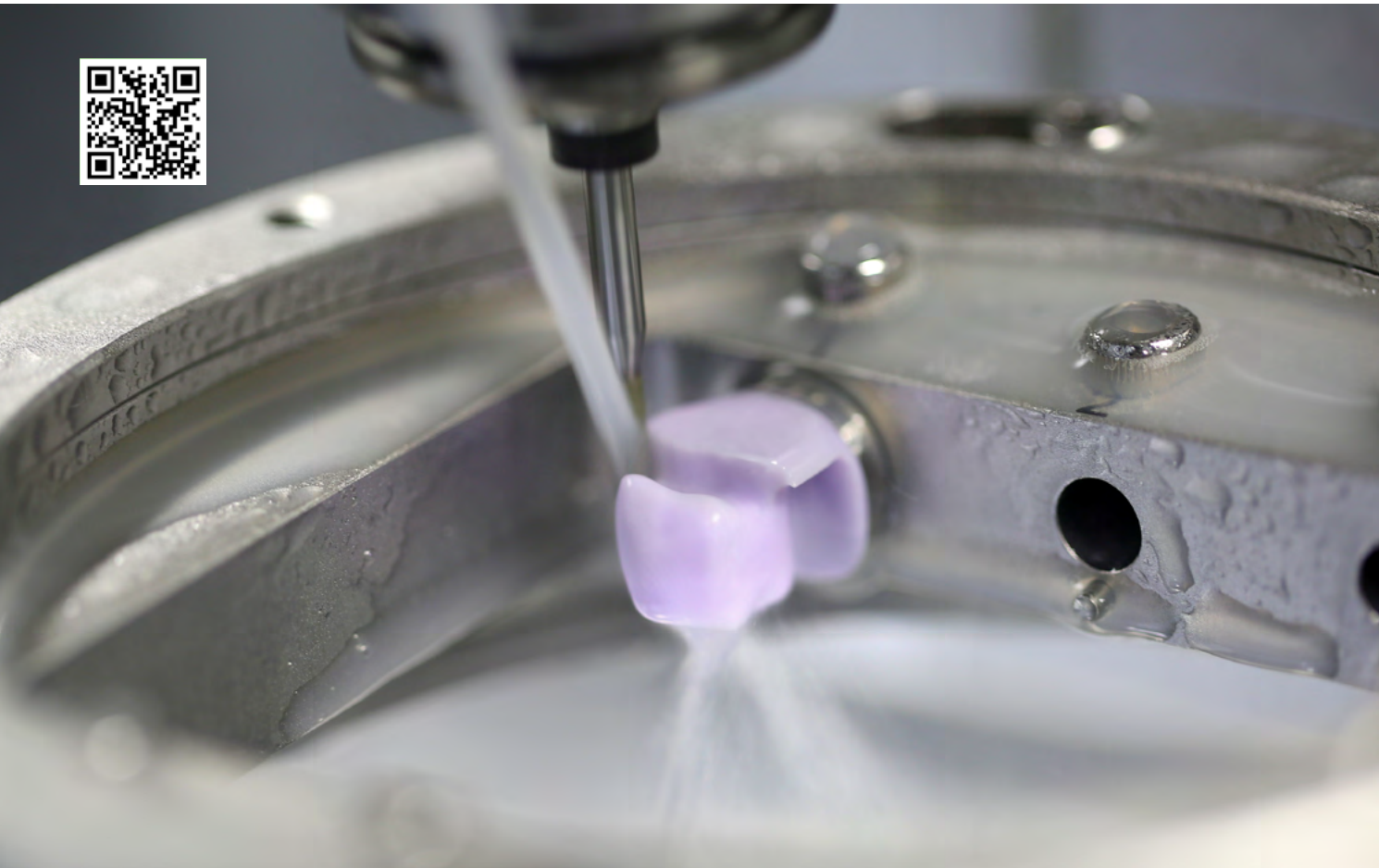
High precision & Stiffness parts for maximum durability



hyperDENT (CAM software)



rainbow™ Mill can undercut and mill various shapes freely and precisely with the simultaneous 5-axis milling system. rainbow™ Mill offers a reliable performance with high torque and fast movement due to the mounting of high performance servo motors. By adopting the high speed and the 1 μm precision spindle, the low vibration minimizes block chipping. Furthermore, wasting of the materials and time may be minimized, which can be attributed to the self-diagnosis and automatic tool changing system. Among dental milling machines, rainbow™ Mill provides highly precise components and mechanical rigidity. It is now possible to mill various kinds of materials including Zirconia, PMMA, and Wax.



# rainbow™ Mill for Clinic

- Optimized for glass ceramic milling by stable water-cooling control system
- Simultaneous 5-axis milling system optimized for variety of designs
- High speed and steady quality in milling
- Tool load and broken detection system
- Multi NC data loading system
- Easy control and User-friendly interface
- Simple and elegant design for dental clinic

Material	Glass ceramic, Zirconia, PMMA
Control axis	Simultaneous 5-axis
Spindle	60,000 rpm, 250W
Motion drives	All servo motors
Tool posts	7 posts (Automatic tool change)
Milling type	Wet processing
Dimensions	45 x 71 x 71 cm
Weight	100 kg





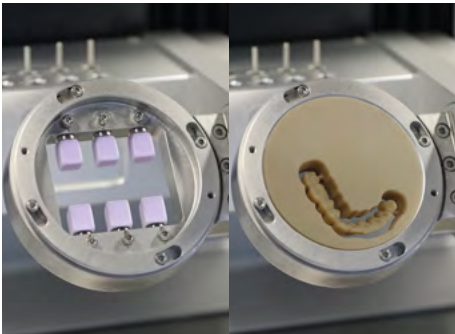
Optimized for Glass ceramic, Zirconia, PMMA



Water-cooling system



Bar & Disk type block can be applied



MNLS function applied (Multi NC data loading system)



7 Tool posts (Automatic change)



High-precision spindle



User friendly touch interface












hyperDENT (CAM software)



Dentium is planning on releasing CAD/CAM System which is not only available to dental labs, but also to dental clinics for chairside use. This same-day prosthesis will increase the satisfaction of clinicians and patients, and we intend to further that benefit by developing more convenient system and comprehensive software through on-going investment in research and development. The rainbow™ Mill for Clinic is an in-practice milling equipment optimized for glass ceramic. It is capable of simultaneous 5-axis milling, delivering prosthesis with high precision.

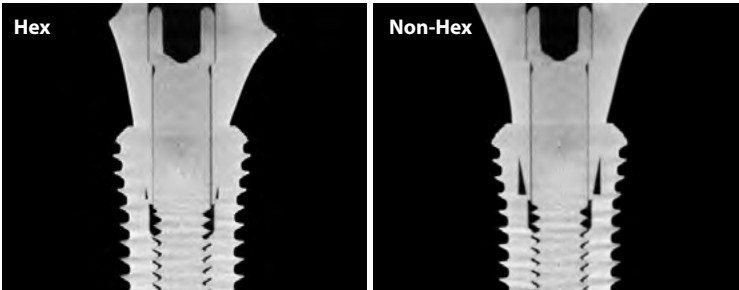
# rainbow™ Mill Bur List

rainbow™ Mill & rainbow™ Mill for Clinic

	No.	Art. No.	Type	Diameter	Coating
	1	BE3D1-N	Ball Endmill	Ø 1	-
	2	BE3D2-N	Ball Endmill	Ø 2	-
	3	BE3D0.5-D	Ball Endmill	Ø 0.5	Diamond Coating
	4	BE3D1-D	Ball Endmill	Ø 1	Diamond Coating
	5	BE3D2-D	Ball Endmill	Ø 2	Diamond Coating
	6	FE3D2-N	Flat Endmill	Ø 2	-
	7	GT3D0.6-ED	Grinding Tool	Ø 0.6	Electroplated Diamond
	8	GT3D1-ED	Grinding Tool	Ø 1	Electroplated Diamond
	9	GT3D2-ED	Grinding Tool	Ø 2	Electroplated Diamond

# rainbow™ Mill - Metal

- Optimized for titanium abutment milling
- High speed and steady quality in milling
- Multi NC data loading system
- Stable water cooling control system
- Easy control and user friendly interface



Cross section of Dentium customized titanium abutment & SuperLine FX4510W

Material	Titanium, PMMA, Glass ceramic
Control axis	4 Axis
Spindle	50,000rpm / 0.45kw
Tool position	8
Ti Blank holder	10
Milling type	Wet processing
Dimensions	510 X 718 X 640 mm

# Dentium Global Milling Center



## Optimized for the implant products from Dentium

Better margin design and control  
A natural and better emergence profile  
Superior angulation

- Ti-based zirconia customized abutment
- Customized titanium abutment
- Zirconia crown (Full zirconia and build-up crown)
- Surgical guide
- Various restorations work



**Dentium**  
For Dentists By Dentists

# rainbow<sup>TM</sup> Dental Lab System

**Dentium**  
For Dentists By Dentists

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