

Rosetta[®] SP

Instructions for Use



Human-Aid
System Supplier **HASS** *beLIVE*



Rosetta[®] SP

Mechanical properties

Mechanical tests on lithium disilicate (LS2) glass-ceramics after heat-pressing show that Rosetta SP crowns can achieve a burst strength (460 MPa) due to the higher aspect ratio of interlocked LS2 crystals which is up to that of existing commercial product.

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1 Indications / Preps Guide

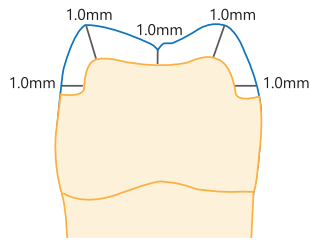
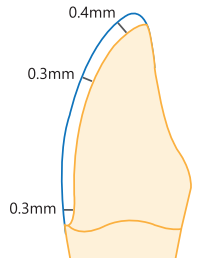
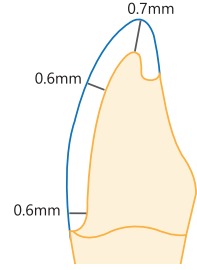


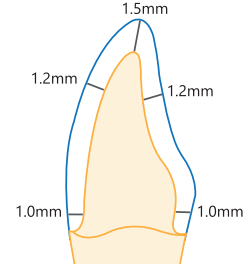
Table Top



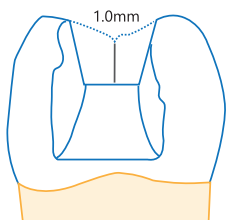
Thin Veneer



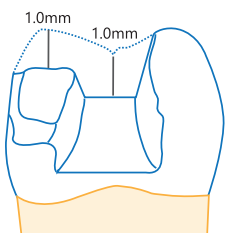
Veneer



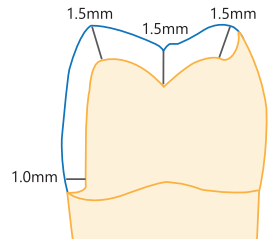
Anterior Crown



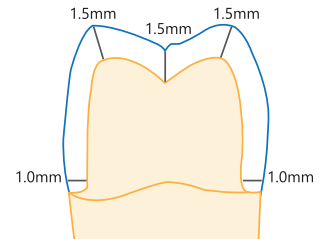
Inlays



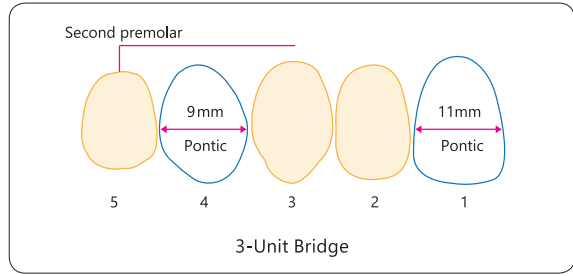
Onlays



Partial crown



Posterior crown



2 Indications



Inlays



Onlays



Veneers



Anterior Single Crowns



Posterior Single Crowns



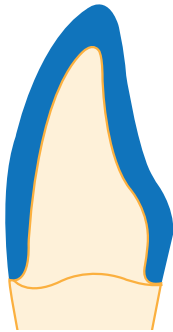
3-Unit Bridge
*up to the second Premolar

3 Minimum thickness

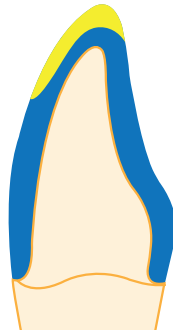
		Table Tops	Thin Veneers	Veneers	Inlays	Onlays	Patial Crowns	Crowns		Bridge	
								Anterior	Posterior	Anterior Region	Premolar Region
Minimum Thickness Staining Technique HT / LT	circular	1.0	0.3 ~ 0.6		1.0 isthmus width	1.0 isthmus width	1.5	1.2	1.5	1.2	1.5
	incisal / occlusal	1.0	0.3 ~ 0.7		1.0 fissure area	1.0 fissure area	1.5	1.5	1.5	1.5	1.5
Minimum Thickness Cut-back Technique (after reduction) HT / LT	circular	-	-	0.6	-	-	1.5	1.2	1.5	1.2	1.5
	labial / occlusal	-	-	0.4	-	-	0.8	0.4	0.8	0.8	0.8
Minimum Thickness Layering Technique MO	circular	-	-	-	-	-	-	0.6	0.8	0.8	0.8
	incisal / occlusal	-	-	-	-	-	-	0.6	0.8	0.8	0.8
	design type	-	-	-	-	-	-	Height ≥ Width			
	connector	-	-	-	-	-	-	-	-	16 mm ²	16 mm ²

Dimension in mm

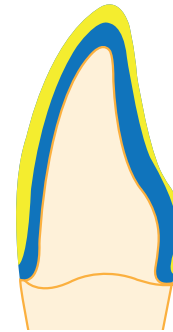
4 Contouring



Staining technique HT/LT



Cut-back technique HT/LT



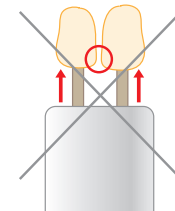
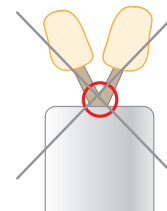
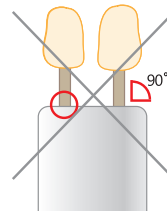
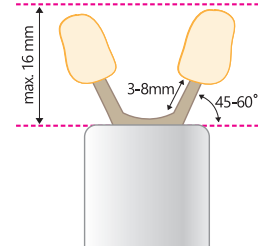
Layering technique MO

■ layering material ■ wax

5 Sprueing

Ingot	Wax + Sprue	Invest Ring
R10 1ea	up to 0.7 g	100 g
R20 1ea	up to 1.7 g	200 g

- Refer to the pressing schedule



6 Investing



Use silicone ring for investment. Slowly and carefully fill in the investment material. Fill the investment ring up to the marking and position the ring gauge with a hinged movement.







7 Preheating

	Press investment
Setting time	30 ~ 45 min.
Preheating start temperature	800°C ; Switch on the preheating furnace
Position of the investment ring in the preheating furnace	Towards the rear wall, tipped with the opening facing down
Final temperature upon preheating the investment ring	850 ~ 880°C
Holding time of the investment ring at the temperature	100 g investment ring - min. 45 min. 200 g investment ring - min. 60 min.
Rosetta SP Ingots	no preheating
Plunger	no preheating

8 Pressing

	100g Investment Ring	200g Investment Ring
Single-Tooth Restorations	R10	R20
3-Unit Bridge	✗	R20
Rosetta SP Ingot	cold ingots	cold ingots
Plunger	cold plunger	cold plunger
Plunger Separater	✓	✓

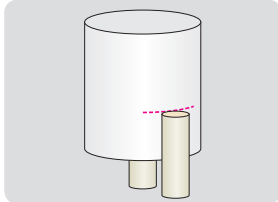
Pressing Schedule

Translucency	Size	Shade	Investment Ring (g)	Start Temp. (B, °C)	Heating Rate (t/, °C / min.)	Max Temp. (°C)	Holding Time (min.)	Vacuum On (°C)	Vacuum Off (°C)
HT		A1, A2, A3, A3.5, B1, B2	100	700	60	900	20	700	900
		W1, W2, W3, W4				910			910
		A1, A2, A3, A3.5, B1, B2	200	700	60	910	40	700	910
		W1, W2, W3, W4				920			920
LT		A1, A2, A3, A3.5, B1, B2, B3, B4	100	700	60	890	20	700	890
		W1, W2, W3, W4 C1, C2, C3, C4, D2, D3, D4				905			905
		A1, A2, A3, A3.5, B1, B2, B3, B4	200	700	60	900	40	700	900
		W1, W2, W3, W4 C1, C2, C3, C4, D2, D3, D4				910			910
MO		MO0, MO1, MO2, MO3, MO4	100	700	60	915	20	700	915
		MO0, MO1, MO2, MO3, MO4	200	700	60	920	40	700	920

Note

- There may be a little difference between the displayed temperature and the real temperature of each furnace. When you use the Rosetta[®] SP ingots, please verify that the above standard schedule is suitable for your press furnace. If it is not, please try to find the optimized pressing temperature through the following processes.
 - If there are some traces of tiny bubble on the surface of pressed restoration ⇒ Please reduce the maximum temperature by 5~10 °C and try the pressing again.
 - If the marginal area of restoration is not formed completely ⇒ Please increase the maximum temperature by 5~10 °C and try the pressing again.
- For the baking firing, rounded supporting pins and object fix putty should be used.
- When the Rosetta[®] SP is used for multi-unit bridge indication which needs two R10 ingots, then R20 ingot should be used to avoid air trap problem.

9 Divesting



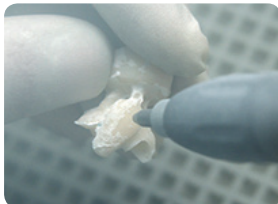
Mark the length of the plunger



Separate the investment ring using a separating disk and break predetermined breaking point



Rough divesting with polishing jet medium at bar pressure of 60 psi until the objects become visible

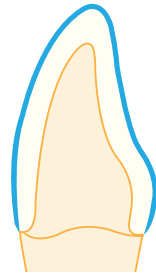


Once again remove the investment ring's residue from the pressed objects by sandblasting. Do not use the alumina beads for the sand blast, just use the glass beads



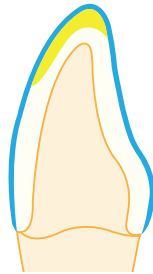
Completely divested Rosetta SP objects without reaction layer

10 Characterizing



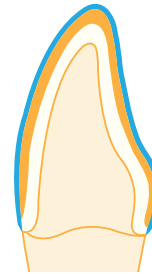
Staining technique HT/LT

1. Staining / glazing*
2. Firing*



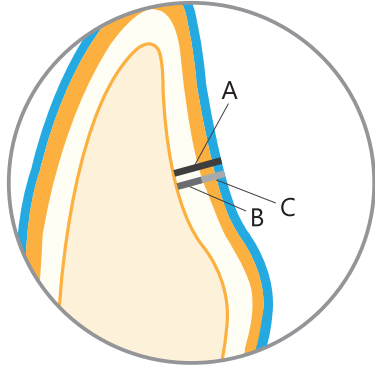
Cut-back technique HT/LT/MO

1. Layering with veneering material*
2. Firing*
3. Staining / glazing*
4. Firing*



Layering technique MO

-  Rosetta SP
-  staining & glazing
-  incisal veneering material
-  veneering material



Note

Layer thickness

Dimension in mm

A	1.2	1.5	2.0	2.5	3.0
B	0.6	0.8	1.1	1.3	1.6
C	0.6	0.7	0.9	1.2	1.4

A : Overall thickness

B : Framework thickness

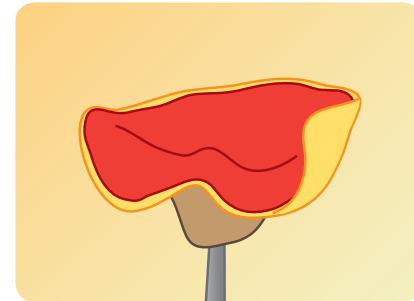
C : Veneering material* thickness

B > C, Framework is to be thicker than veneering material*

11 Preparing for Cementation



Do not blast restoration.



Etch for 20 sec with 5% hydrofluoric acid.*

* Respect all information given in the manufacturer's usage regulations.