

The Lithium Disilicate Ingot for the Creation ZI-F

Instructions for Use

**Human-Aid
System Supplier**

Note:

*Do NOT use for clinical case before regulatory approved.
This trial materials are NOT approved yet.*



Description

The Ingot of lithium disilicate glass-ceramics is designed to be compatible with Veneering materials of Creation ZI-F. First of all, the ingot served as framework allows dental technicians to make most aesthetic restoration with Creation ZI-F Veneering materials by their own creative build-up technique.



1. Indications/Preps Guide

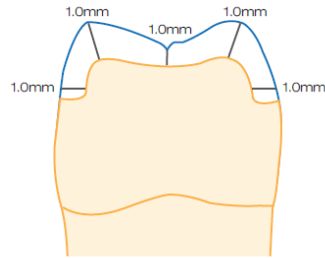
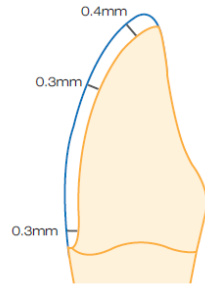
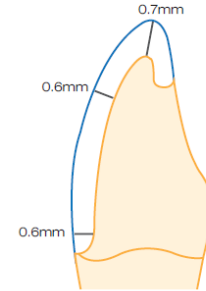


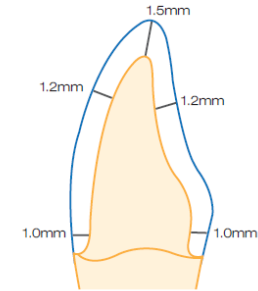
Table Top



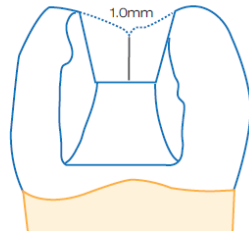
Thin Veneer



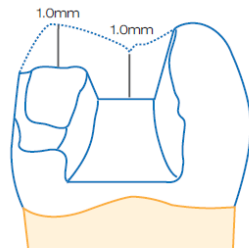
Veneer



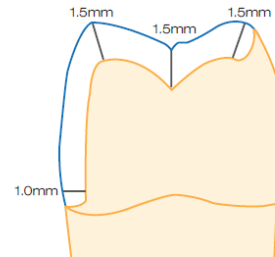
Anterior Crown



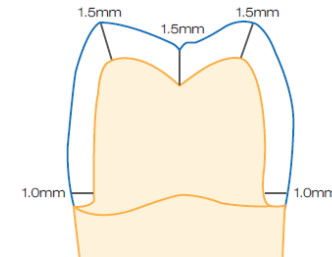
Inlays



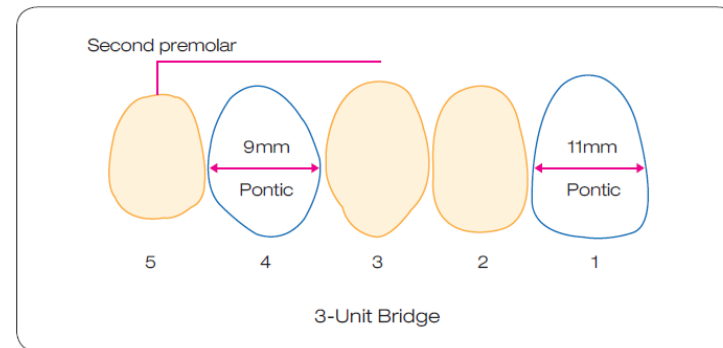
Onlays



Partial crown



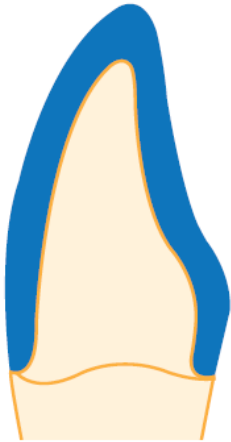
Posterior crown



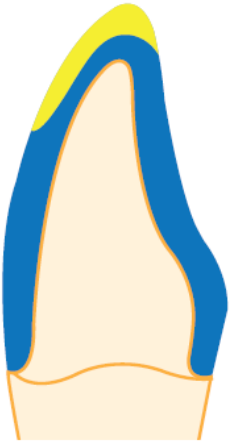
2. Select the Ingots

Translucency Levels	Processing Technique			Indications								
	Staining Technique	Cut-Back Technique	Layering Technique	Table Tops	Thin Veneers	Veneers	Inlays	Onlays	Patial Crowns	Anterior Crowns	Posterior Crowns	3-Unit Bridges
High Translucency	★	★		★	★	★	★	★	★	★	★	★
Low Translucency	★	★			★	★			★	★	★	★
Medium Opacity			★							★	★	★

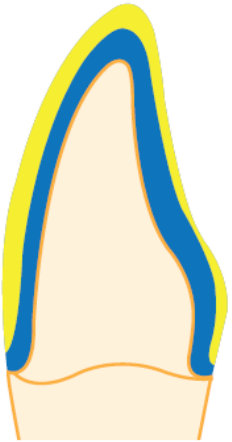
3. Contouring



Staining technique HT/LT



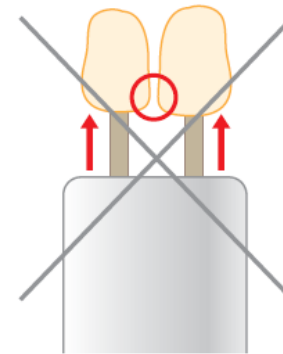
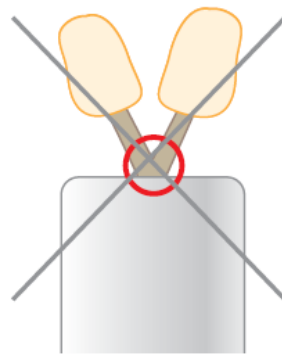
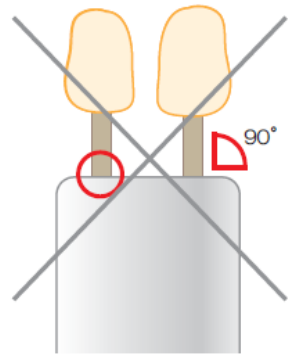
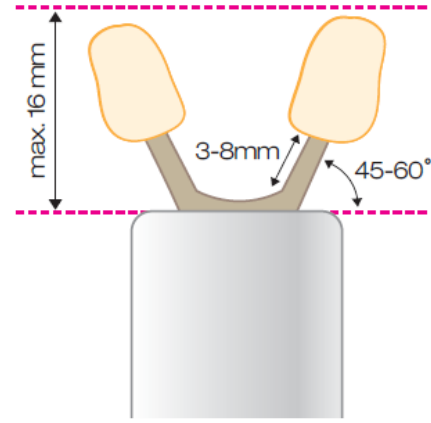
Cut-back technique HT/LT



Layering technique MO

layering material
wax

4. Sprueing



5. Investing

- Use the silicon ring for investment
- Do NOT use a wetting agent(de-bubblizer) on the wax surface.
- For 15~20 seconds, mix by hand and apply the vacuumed mixture for 60 seconds.
- Please refer to the manufacturer's recommendation of use for the detailed investing instruction.



6. Preheating(Burn-out)

	Press investment
Setting time	min. 30 min., max. 45 min.
Preheating furnace temperature	850°C (1562°F) ; Switch on the preheating furnace in time
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°C / 1562°F
Holding time of the investment ring at the temperature	100g investment ring - min. 45 min. 200g investment ring - min. 60 min.
Ingots	no preheating
Plunger	no preheating

7. Pressing

[pressing furnace: Austromat 654 press-i-dent, DEKEMA]

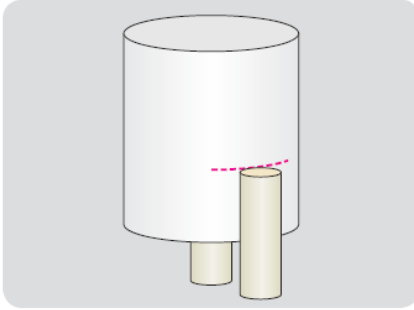
Translucency	Size	Start Temp. (°C)	Heating Rate (°C/min)	Final Temp. (°C)	Holding Time (min)	Press Duration	Press Level
HT/LT/MO	R10	700	60	945	20	Auto 1	5

Note:

Before you press ingots, please verify that the above recommended schedule is suitable for the furnace being used. Otherwise, try to find the optimized pressing temperature through the following process.

- 1) If there are some traces of tiny bubbles on the surface of object, reduce the max. temperature by -5~-10°C and retry the pressing procedure.*
- 2) If the marginal area of object is not formed completely, increase the max. temperature by +5~+10°C and retry the pressing process.*

8. Divesting



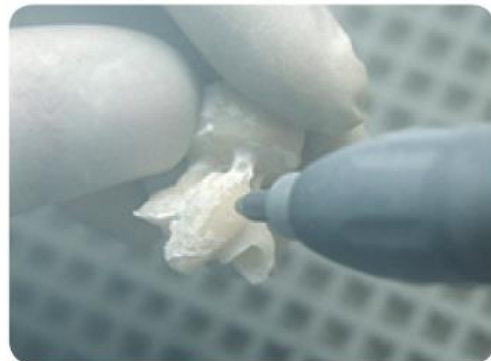
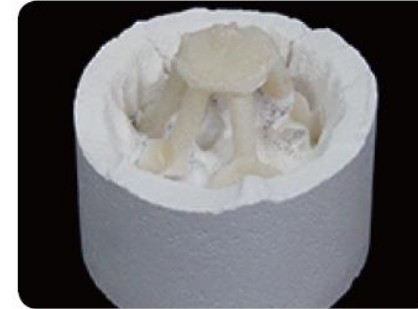
Mark the length of the plunger



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



Rough divesting with polishing jet medium until the objects become visible



Once again remove the investment ring's residue from the pressed objects by sandblasting.



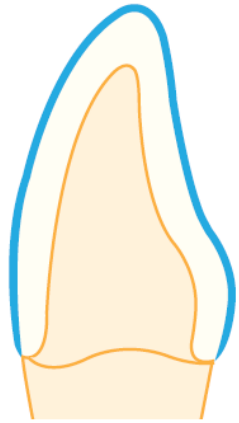
Completely divested objects

Note:

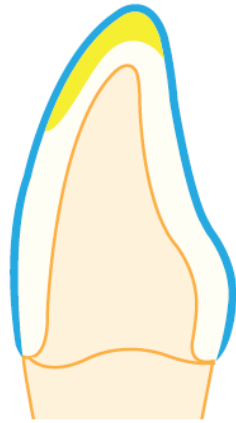
Divesting:

- 1) *Do NOT use Al_2O_3 media, glass beads should be used*
- 2) *The rough removal is 4 bar, more detailed removal is 2 bar are recommended*
- 3) *You do NOT need to apply object into hydrofluoric acid*

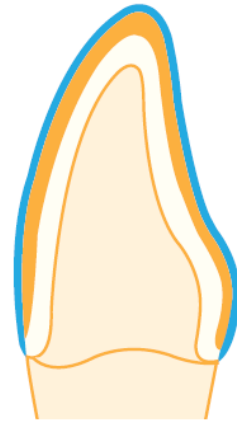
9. Characterizing




Staining technique HT/LT

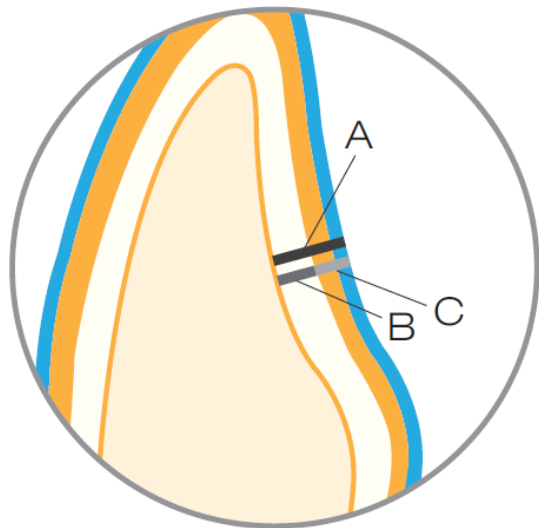


Cut-back technique HT/LT



Layering technique MO

-  Pressed framework
-  staining & glazing
-  incisal veneering material
-  veneering material



 Note

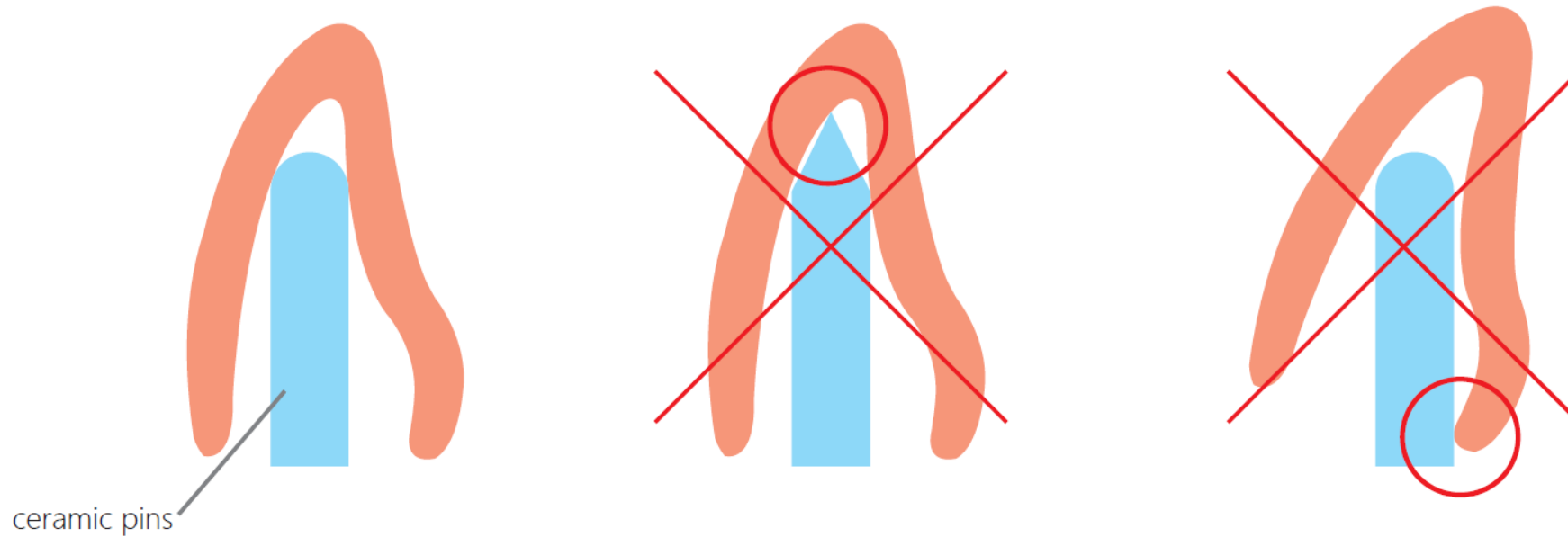
MO layer thickness

A	0.8	1.0	1.2	1.5	1.8	2.0	2.5	3.0
B	0.4	0.5	0.6	0.8	1.0	1.1	1.3	1.6
C	0.4	0.5	0.6	0.7	0.8	0.9	1.2	1.4

A : Overall thickness
 B : Framework thickness
 C : Veneering material* thickness

Dimension in mm

10. Supporting Pins



Note

- Use the honey-comb firing tray and rounded supporting ceramic pins.
- **Metal pin must not be used.**

11. Preparing for Cementation



Do not blast restoration.



Etch for 20s with 5% hydrofluoric.



Courtesy restoration of Gamin Kim

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