



EN

Lithium Disilicate-Based Press Ingots

Amber[®] Press

User's Manual



www.hassbio.com



RX Only

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

Amber[®] Press

User's Manual

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1. Introduction

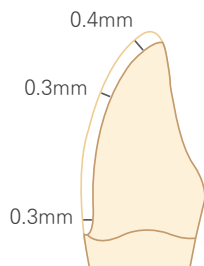
Lithium Disilicate-Based Press Ingots

Amber[®] Press

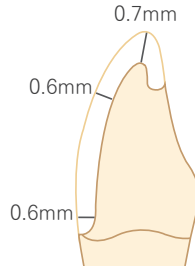


Amber[®] Press remarkably raises the bar for quality level of press ingots. Better-than-ever flexural strength comparing to previous lithium disilicate materials. Free from use of acid thanks to very small reaction layer residue on post-press product. Highly aesthetic and natural look achieved by diverse options for shade and indications.

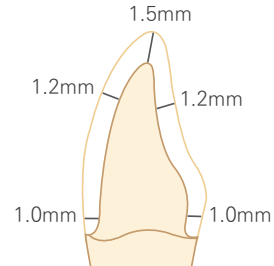
2. Preparation Guide



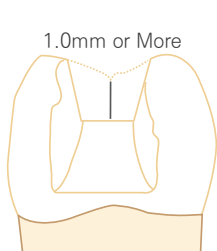
Thin Veneer



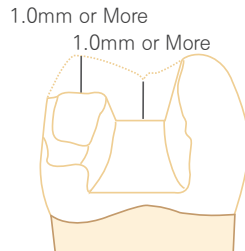
Veneer



Anterior Crown



Inlays



Onlays

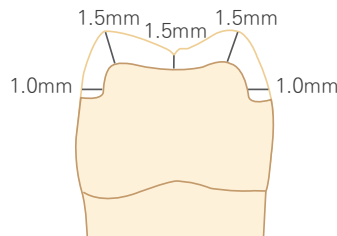
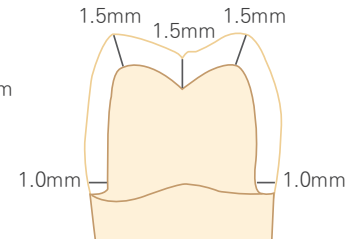


Table Top



Posterior crown

TIP!



Make the prep tooth surface in the most rounded shape possible.
(Deep chamfer margin, rounded shoulder margin).

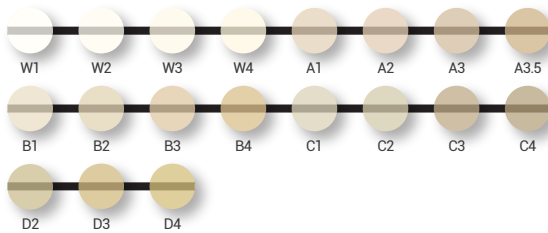


Maintain the most even margin thickness possible.

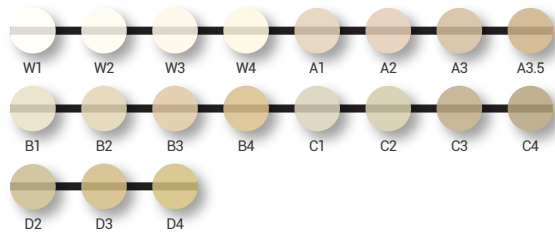
3. Select the ingots

... Available shades

HT(High Translucency)



LT(Low Translucency)



MO(Medium Opacity)

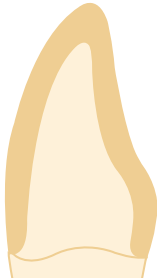


TIP!

! Please choose one step brighter shade than the one you actually plan for the final restoration. (This prevents restoration from decreasing in brightness during staining.)

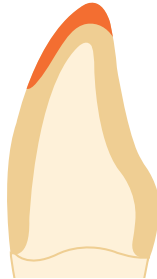
4. Wax-up

... Complete the final shape of restorations. Remember to use combustible wax when doing a burn-out process.



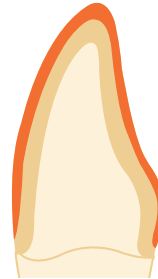
Staining technique

HT / LT



Cut-back technique

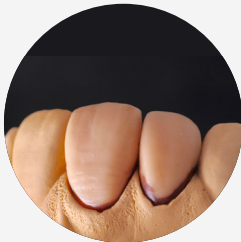
HT / LT



Layering technique

MO

■ wax
■ layering material



Anterior Crown



Posterior Crown

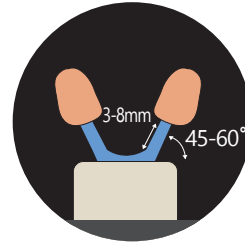
TIP!



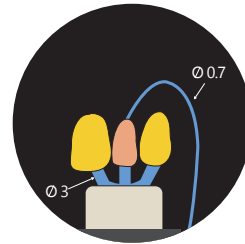
Form shapes while ensuring the wax thickness is not less than 0.3 mm

5. Sprueing

... Attach the sprues in the direction of flow for ceramic so that ingot can flow smoother during pressing.



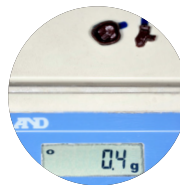
... Connect the object and investment ring base at an $\angle 45\sim 60^\circ$ angle, at a length of 3~8mm, using $\varnothing 3\sim 3.5$ mm of sprueing wax.



... Keep a distance of at least 5 mm between the wax-up objects and silicone ring.

... It is recommended to attach sprueing wax to each crown and it aids gas ventilation if air vent is attached in the thick part.

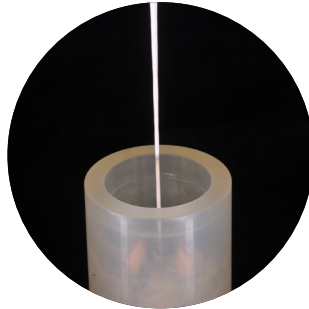
... When finishing sprueing work, measure the total weight and subtract the weight of zirconia framework to decide the proper ingot size.



Ingot	Wax Weight	Invest. Ring
R10 1 ea(3 g)	~ 0.7 g	100 g
R20 1 ea(6 g)	1.2 ~ 1.4 g	200 g

6. Investing

- After mixing powder and liquid by hand for 20 seconds, mix it again with vacuum mixer. If it has hardened in the pressurizer after investing, strength and surface roughness are enhanced during pressing.



TIP!



For details, please refer to the IFU from the investment material manufacturer.

Phosphate-based investment material for ceramic press

Amber[®] Vest

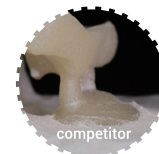
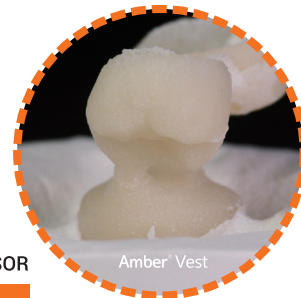


Packaging: KIT POWDER + EXPANSOR

Amber[®] Vest POWDER
5kg (50X100g)

+

Amber[®] Vest EXPANSOR-B
LIQUID (1,000ml)



Comparison of Reaction Layer Generation on Surface

7. Preheating(Burn-Out)



- ... Remove the silicone ring only after the investment is completely set.
- ... Trim the upper side flat and place the investment ring in the preheating furnace.
- ... The lower side of the investment should face down. Pay attention to ensure good drainage of the melted wax.

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 investment ring at the temperature	100g investment ring - min. 45 min.
Ingot & plunger	no preheating
Plunger (option)	no preheating

TIP!

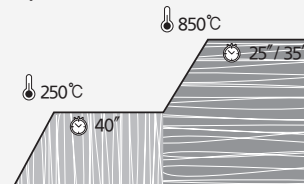


Burn-out temperature and time should be according to the manufacturer's guidelines.

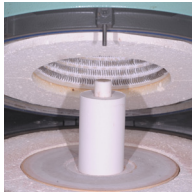
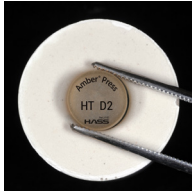
ex) Phosphate-based investment material for ceramic press

Amber® Vest

The highest temperature : 850°C



8. Pressing



... Make sure to put the ingot and plunger into the ring only at room temperature. At this time, printed side of the ingot should face up. Check if the ring bottom is placed flat.

... Proceed to pressing the ingot at the appropriate temperature.

... Pressing Schedules

TIP!



There may be a difference between the temperature indicated on the furnace and the actual temperature.

If problems occur after pressing, find out the optimal pressing temperature with the following process.

- Bubbles or discoloration on restoration surface : Decrease the Final Temp. by 5~10°C degrees and try again.
- If pressing is not completed : Increase the Final Temp. by 5~10°C degrees and try additional 5 minutes of holding time.

Austromat Press-i-dent (Dekema)*

*Austromat Press-i-dent is a registered trademark of DEKEMA.

Translucency	Size	Shade	Investment Ring	Start Temperature	Heating Rate	Final Temperature	Holding Time	Press Duration	Press Level
HT	R10 / R20	A1, A2, A3, A3.5, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4, W1, W2, W3, W4	Small (100g) / Large (200g)	700°C	60°C/min	925°C	20 Min (100g) / 30 Min (200g)	Auto 1	6
LT		A1, A2, A3, A3.5, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4, W1, W2, W3, W4							
MO		MO0, MO1, MO2, MO3, MO4				930°C			

Horizon (Shenpaz)*

*Horizon is a registered trademark of Shenpaz.

Translucency	Size	Shade	Investment Ring	Start Temperature	Heating Rate	Max Temperature	Holding Time	Vacuum On	Vacuum Off
HT	R10 / R20	A1, A2, A3, A3.5, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4, W1, W2, W3, W4	Small (100g) / Large (200g)	700°C	60°C/min	915°C	15 Min / 20 Min	700°C	915°C
LT		A1, A2, A3, A3.5, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4, W1, W2, W3, W4							
MO		MO0, MO1, MO2, MO3, MO4				920°C			

EP600 (Ivoclar Vivadent)*

*EP600 is a registered trademark of Ivoclar Vivadent.

Translucency	Size	Shade	Investment Ring	Stand-by Temperature	Temperature Increase	Holding Temperature	Holding Time	Stop Speed
HT	R10 / R20	A1, A2, A3, A3.5, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4, W1, W2, W3, W4	Small (100g) / Large (200g)	700°C	60°C/min	930°C	15 Min (100g) / 25 Min (200g)	300µm/min
LT		A1, A2, A3, A3.5, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4, W1, W2, W3, W4						
MO		MO0, MO1, MO2, MO3, MO4						

EP3000 (Ivoclar Vivadent)*

*EP3000 is a registered trademark of Ivoclar Vivadent.

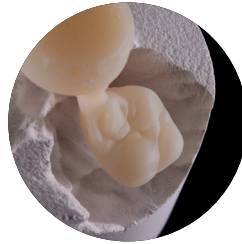
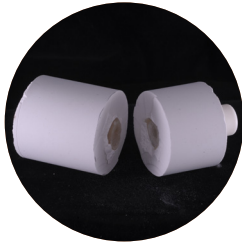
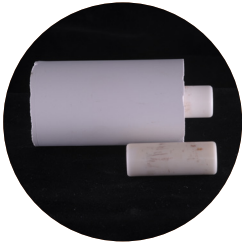
Translucency	Size	Shade	Investment Ring	Stand-by Temperature	Temperature Increase	Holding Temperature	Holding Time	Stop Speed
HT	R10 / R20	A1, A2, A3, A3.5, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4, W1, W2, W3, W4	Small (100g) / Large (200g)	700°C	60°C/min	915°C	15 Min (100g) / 25 Min (200g)	300µm/min
LT		A1, A2, A3, A3.5, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4 W1, W2, W3, W4						
MO		MO0, MO1, MO2, MO3, MO4						

EP5000 (Ivoclar Vivadent)*

*EP500 is a registered trademark of Ivoclar Vivadent.

Translucency	Size	Shade	Investment Ring	Stand-by Temperature	Temperature Increase	Holding Temperature	Holding Time	Stop Speed
HT	R10 / R20	A1, A2, A3, A3.5, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4, W1, W2, W3, W4	Small (100g) / Large (200g)	700°C	60°C/min	915°C	20 Min (100g) / 30 Min (200g)	300µm/min
LT		A1, A2, A3, A3.5, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4 W1, W2, W3, W4						
MO		MO0, MO1, MO2, MO3, MO4						

9. Divesting



... First check the length of the plunger and cut the investment with a disk.

... Use Al_2O_3 for sandblasting.
4 bar of pressure for general blasting and 2 bar for precise blasting is recommended.
Be cautious and only work after the ring has fully cool down.

TIP!

! When cutting sprues, keep getting disk wet with plenty of water so that you can be cautious about micro fracturing.

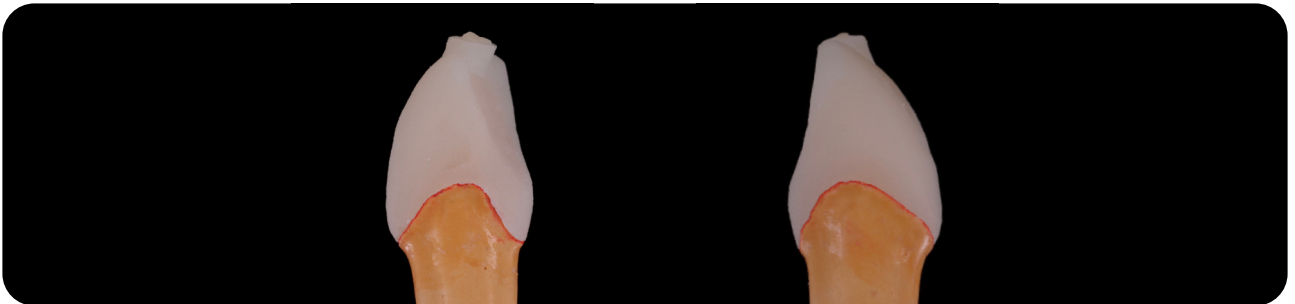
Refer to the instructions for use of the corresponding investment materials. Just few amount of reaction layer remains on the result at the recommended temperature.

10. Adjustment

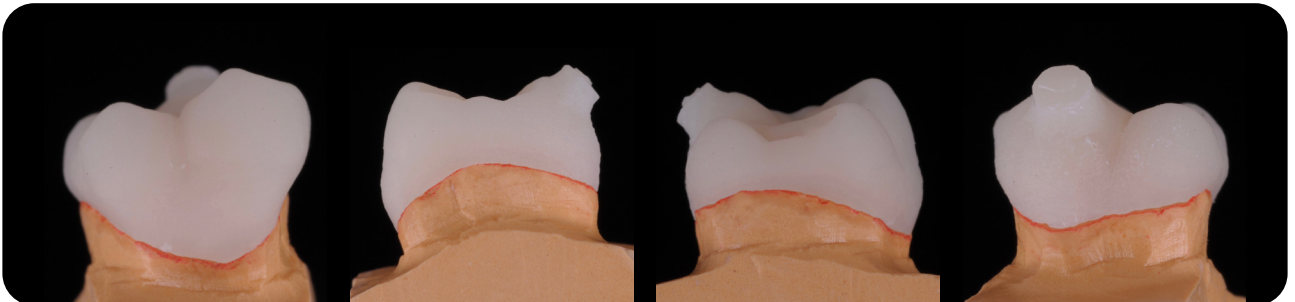
... Inlay



... Anterior Crown



... Posterior Crown



11. Technique

Layering Technique

1. After completing the framework, blast restoration with Al_2O_3 at 1-2 bar pressure.(0.1-0.2MPa)

2. Stain the (inner) surface.

3. Fire after spraying opaque dentin powder, then, roughen the surface.

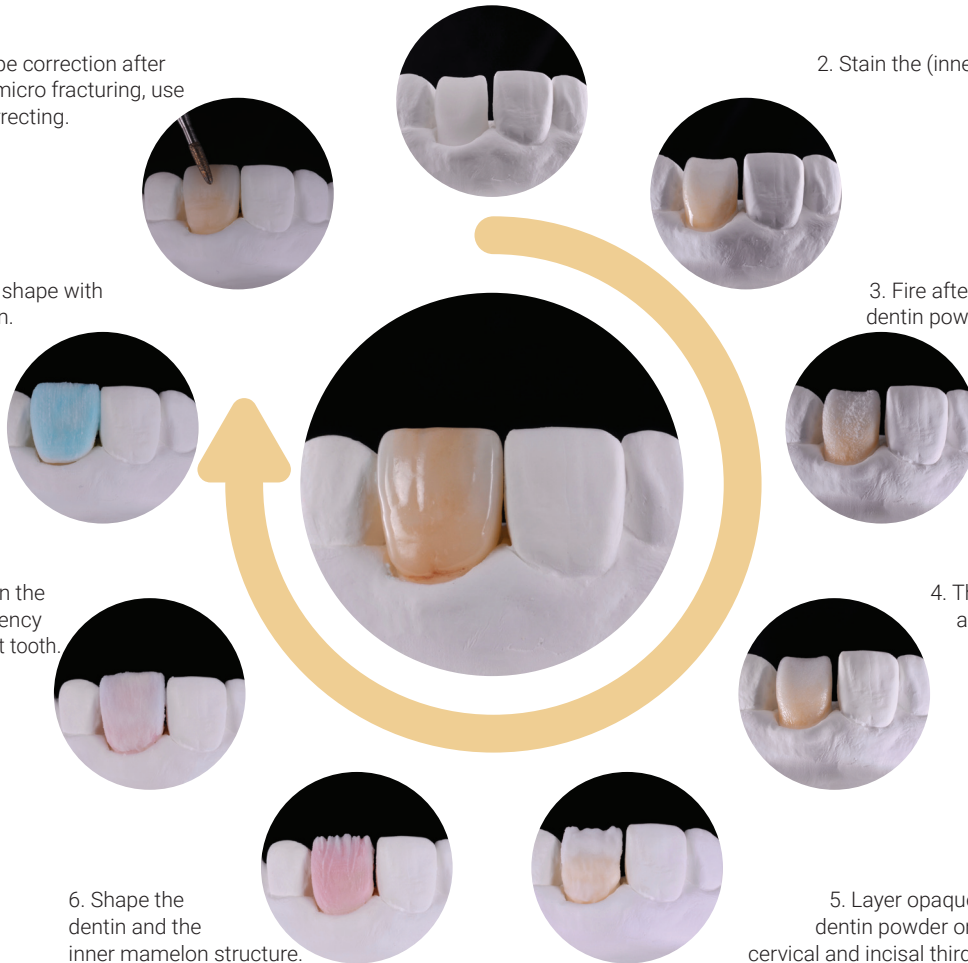
4. The surface after firing.

5. Layer opaque dentin powder on cervical and incisal third.

6. Shape the dentin and the inner mamelon structure.

8. Filling out the shape with enamel porcelain.

9. Perform shape correction after firing To avoid micro fracturing, use water when correcting.



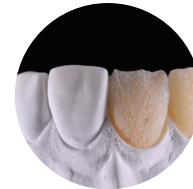


Cut-back Technique

1. After completing the framework, blast restoration with Al_2O_3 at 1-2 bar pressure.(0.1-0.2MPa)



2. Fire after spraying opaque dentin powder, then, roughen the surface.



3. The surface after firing.



4. Expresses the internal structure of the cut and the characteristics of the translucency.



5. Filling out the shape with enamel porcelain.



Staining technique

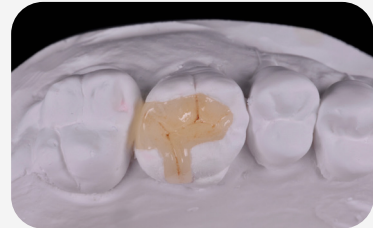
1. Inlay / Onlay



After completing the framework, blast restoration with Al_2O_3 at 1-2 bar pressure. (0.1-0.2MPa)



Stain



Final result

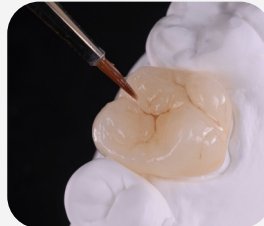
2. Crown



After completing the framework, blast restoration with Al_2O_3 at 1-2 bar pressure. (0.1-0.2MPa)



Shape correction



Stain



Final result

After shape correction, sandblast the spot with Al_2O_3 , which will be stained, with 1 bar or less. Apply the stain as the target shade.

12. Completion



Courtesy of CDT. Won Pil Jang and Dr. Hee Kyong Lee, Seoul, Korea

13. Indications / Contra-Indications

Indication



Inlays



Onlays



Veneers



Anterior Single Crowns



Posterior Single Crowns





3-Unit Bridge
*up to the second Premolar

Contra-indication

- Very deep subgingival preparations
- Maryland bridges
- Patients with severely reduced residual dentition
- Bruxism
- Cantilever bridges

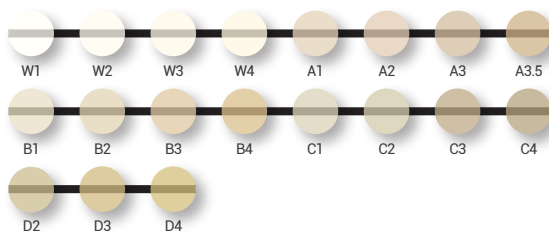
14. Product Line-up

Product Line-up

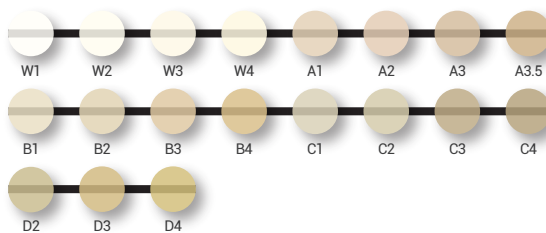
Amber® Press		Dimensions (mm)	pcs / Pack
	R10	Ø12.7 x T 10	5 ingots
	R20	Ø12.7 x T 20	3 ingots

Available shades

HT(High Translucency)



LT(Low Translucency)



MO(Medium Opacity)





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