



EN

Lithium Disilicate-Based Press Ingots

# Amber<sup>®</sup> Press

User's Manual



[www.hassbio.com](http://www.hassbio.com)

CE2195



RX Only



Human-Aid  
System Supplier

# Amber<sup>®</sup> Press

User's Manual

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## 1. Introduction

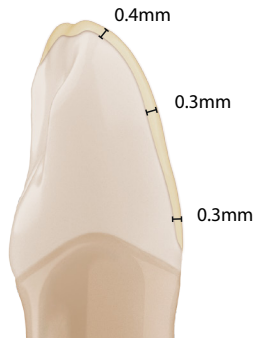
Lithium Disilicate-Based Press Ingots

# Amber<sup>®</sup> Press

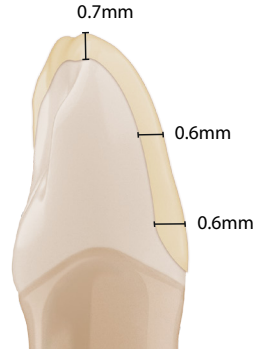


Amber<sup>®</sup> Press remarkably raises the bar for quality level of press ingots. Better-than-ever flexural strength comparing to previous lithium disilicate materials. Free from use of acid thanks to very small reaction layer residue on post-press product. Highly aesthetic and natural look achieved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

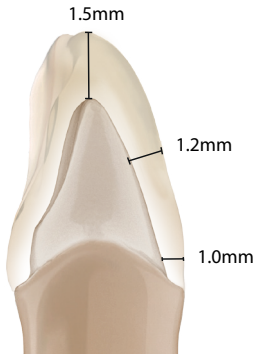
## 2. Preparation Guide



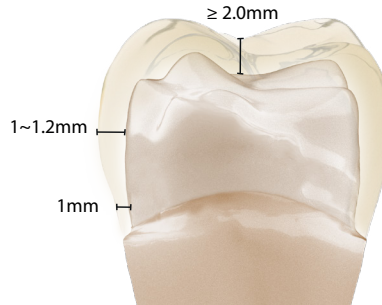
Thin Veneer



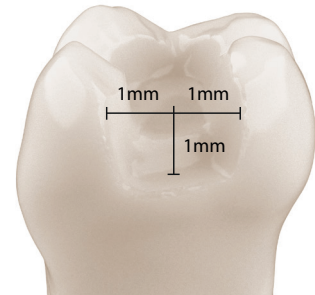
Veneer



Anterior Crown



Posterior Crown



Inlay/Onlay

### TIP!

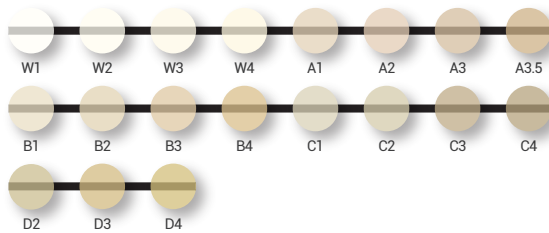
! Make the prep tooth surface in the most rounded shape possible. (Deep chamfer margin, rounded shoulder margin).

! Maintain the most even margin thickness possible.

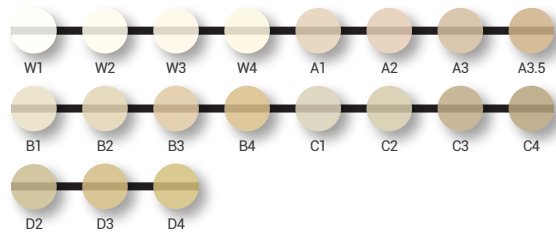
### 3. Select the ingots

... 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

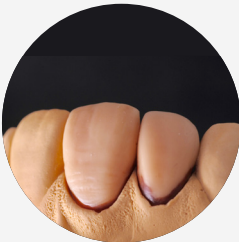


Layering technique

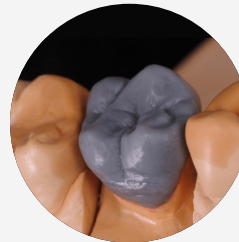
MO

Wax

layering material



Anterior Crown



Posterior Crown

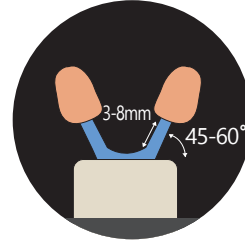
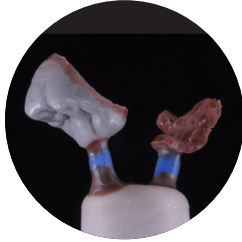
**TIP!**



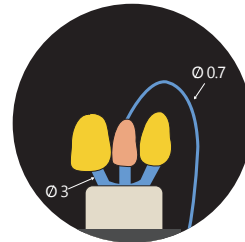
Form shapes while ensuring the wax thickness is not less than 0.3 mm

## 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 3~3.5 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.

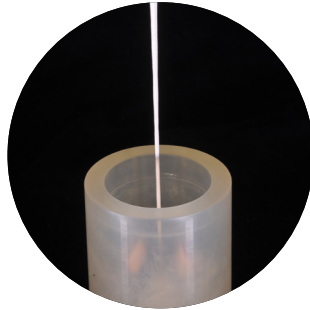
... When finishing sprueing work, measure the total weight and subtract the weight of zirconia framework to decide the proper ingot size.



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<sup>®</sup> Vest

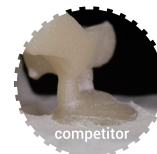
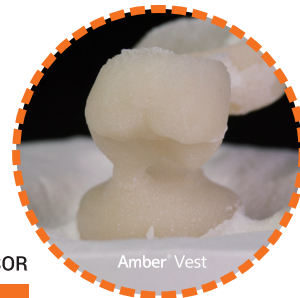


Packaging: KIT POWDER + EXPANSOR

Amber<sup>®</sup> Vest POWDER  
5kg (50X100g)

+

Amber<sup>®</sup> 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	<b>min. 30 min, max. 45 min.</b>
Preheating furnace temperature	<b>850°C(1562°F) ; Switch on the preheating furnace in time</b>
Position of the investment ring in the preheating furnace	<b>Towards the rear wall, tipped with the opening facing down</b>
Final temperature upon preheating the investment ring	<b>850°C / 1562°F</b>
Holding time of investment ring at the temperature	<b>100g investment ring - min. 45 min.</b>
Ingot & plunger	<b>no preheating</b>
Plunger (option)	<b>no preheating</b>

**TIP!**

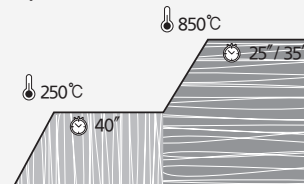


Burn-out temperature and time should be according to the manufacturer's guidelines.

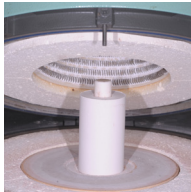
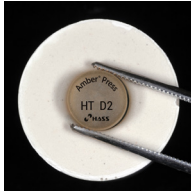
ex) Phosphate-based investment material for ceramic press

**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							

## 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.

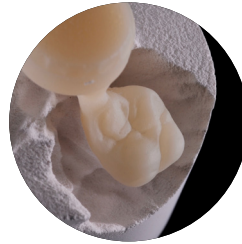
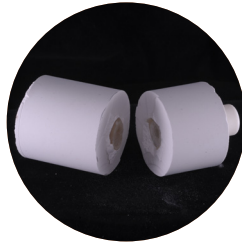
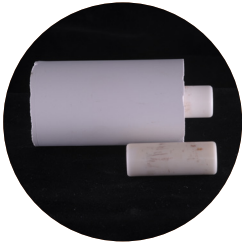
Translucency	Size	Shade	Investment Ring	Stand-by Temperature	Temperature Increase	Holding Temperature	Holding Time	Stop Speed
HT	R10 / R20	A1, A2, A3, A3.5, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4, W1, W2, W3, W4	Small (100g) / Large (200g)	700°C	60°C/min	915°C	15 Min (100g) / 25 Min (200g)	300µm/min
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  $\text{Al}_2\text{O}_3$  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!

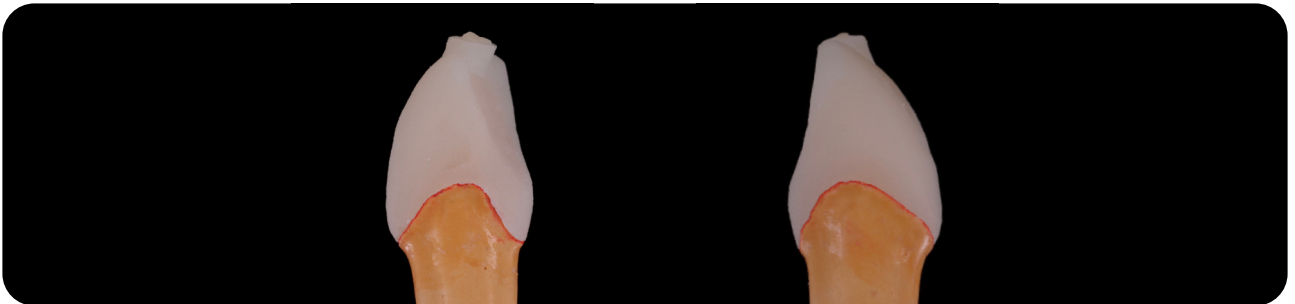
- ! When cutting sprues, keep getting disk wet with plenty of water so that you can be cautious about micro fracturing.  
Refer to the instructions for use of the corresponding investment materials. Just few amount of reaction layer remains on the result at the recommended temperature.

## 10. Adjustment

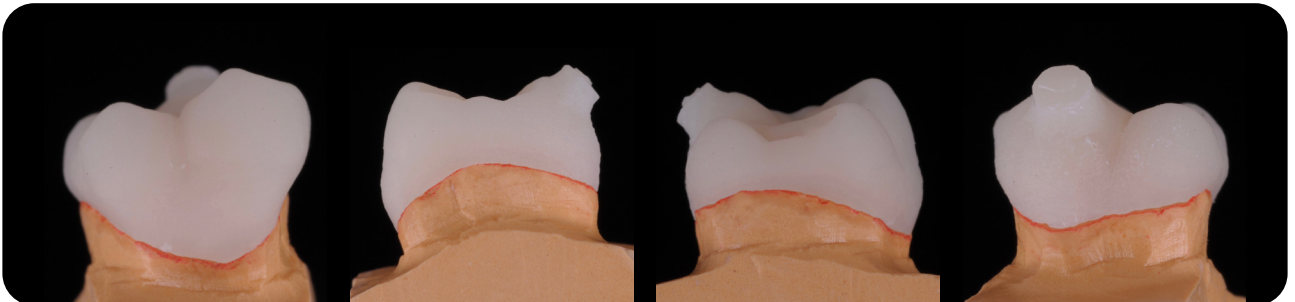
### ... Inlay



### ... 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.

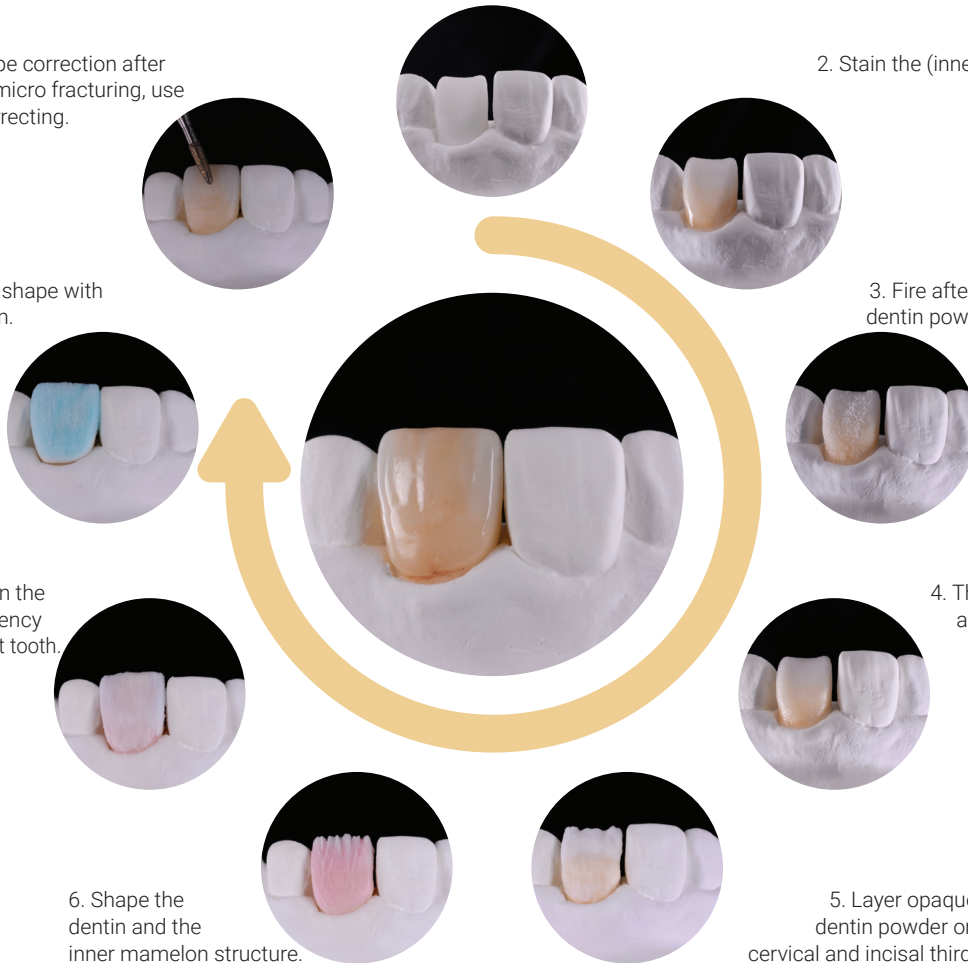
5. Layer opaque dentin powder on cervical and incisal third.

6. Shape the dentin and the inner mamelon structure.

7. Characterize in the desired translucency level as the target tooth.

8. Filling out the shape with enamel porcelain.

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



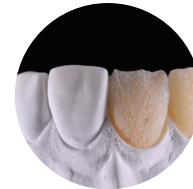


## Cut-back Technique

1. After completing the framework, blast restoration with  $\text{Al}_2\text{O}_3$  at 1-2 bar pressure.(0.1-0.2MPa)



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



5. Filling out the shape with enamel porcelain.



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



3. The surface after firing.



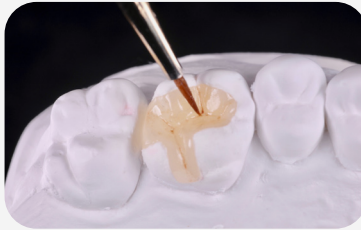


## Staining technique

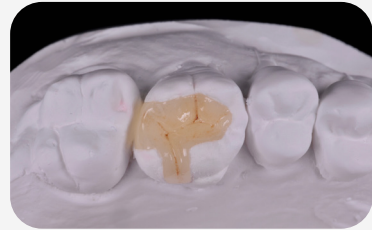
### 1. Inlay / Onlay



After completing the framework, blast restoration with  $\text{Al}_2\text{O}_3$  at 1-2 bar pressure. (0.1-0.2MPa)



Stain

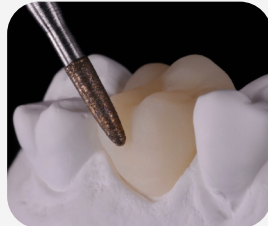


Final result

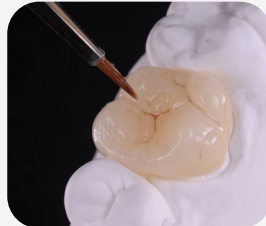
### 2. Crown



After completing the framework, blast restoration with  $\text{Al}_2\text{O}_3$  at 1-2 bar pressure. (0.1-0.2MPa)



Shape correction



Stain



Final result

After shape correction, sandblast the spot with  $\text{Al}_2\text{O}_3$ , 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**

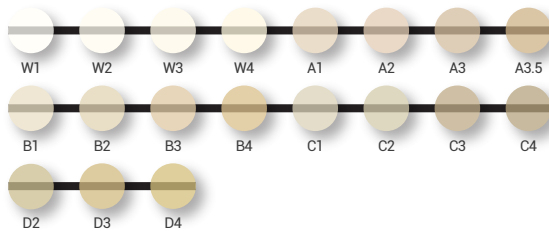
## 14. Product Line-up

### Product Line-up

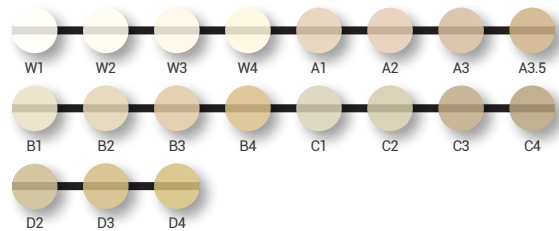
Amber® Press		Dimensions (mm)	pcs / Pack
	R10	Ø12.7 x T 10	5 ingots
	R20	Ø12.7 x T 20	3 ingots

### Available shades

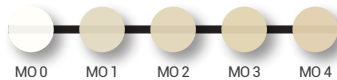
#### HT(High Translucency)



#### LT(Low Translucency)



#### MO(Medium Opacity)





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