

WHO WE ARE

- Axsys Dental Solutions is an independent professional services company focused on providing the best possible hardware and software technology along with industry-leading training and support services
- for the design and manufacture of dental prostheses.
- Our focus is providing the right technology, training and support to our clients in the dental industry.
- Since the beginning, year after year we have earned premier reseller status with many of our software and hardware partners
- This status means that our organization's ability to sell and service the products we represent is among the best in the world and that many organizations have placed their trust and livelihoods in Axsys Dental Solutions.

CONTACT US

We are located at the intersection of West Rd and West Tech Drive, North of the Wixom Rd. exit off I-96.

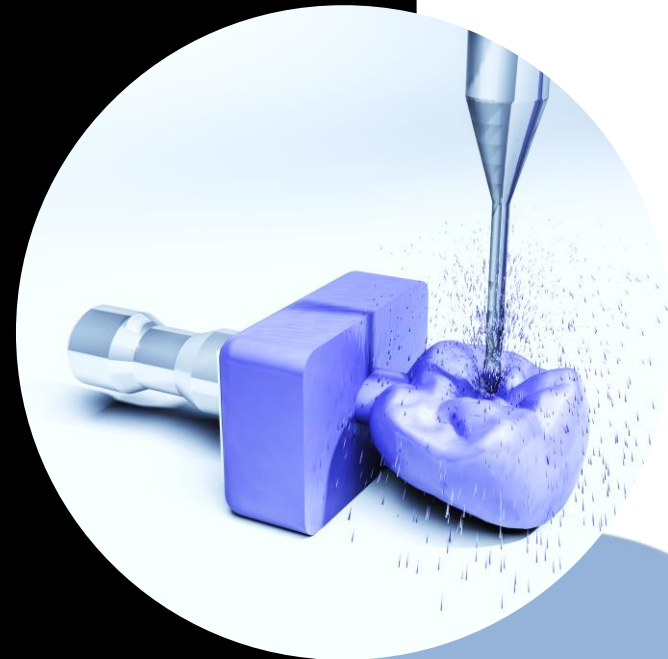
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Instructions for Use



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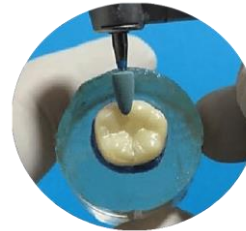
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suprême glass-ceramics are
compatible with most mainstream brands
of glaze paste and porcelain powder.

PROCESSING

1. Grinding/Polishing



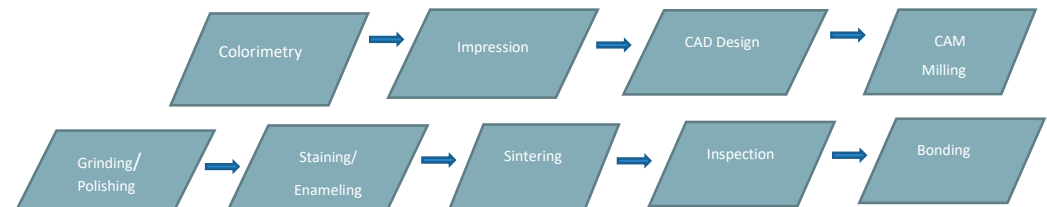
The connector pin should be removed with a diamond turning disc in the laboratory with a motor and a hand piece with light force.

After the connecting pin is removed, use a coarse ceramic wheel with a laboratory motor to remove surface roughness using light or medium force at a speed of 8,000-12,000 rpm.

Use a coarse grit bur to grind the surface in preparation for polishing and to create a more consistent surface—then use a medium grit.

Finally, you can polish with a fine grain, white rubber wheel with light pressure to achieve a smooth and polished effect.

2. Workflow



When grinding ceramic materials, make sure to avoid overheating. Use water.

3. Dye & Enamel

Before staining and glazing, the restoration must be clean and free of grease. The restoration surface can be cleaned using a steam cleaner or by immersing it in an ultrasonic cleaner using distilled water for 5-10 minutes. If you are using a wave cleaner, clean thoroughly using soap and water.



Avoid any form of contamination after cleaning. Use a plastic spatula to take out the required amount of stain or glaze and place it on the mixing board.

To obtain the right consistency, dilute the material with the glaze liquid.

Use a brush to apply a thin layer of enamel over the entire crown surface. Apply a thin layer of stain over the gingival area and extend to the incisal area or (as needed) with a brush. Use the shade guide to check the color. Use a brush to increase or decrease the amount of stain to achieve the desired aesthetic effect.

4. Sintering

Place the restoration on the honeycomb tray and finally on the sintering plate/table of the furnace.

1. Rapid Sintering Method

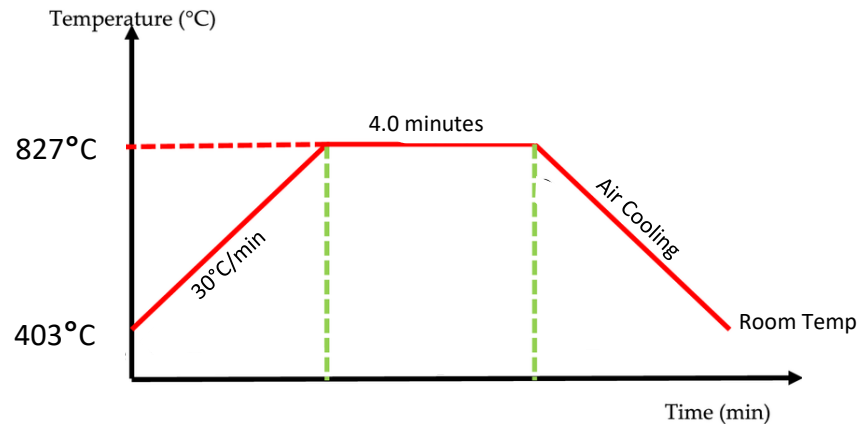
After the ground/polished restoration is cleaned & dried, glaze/stain is evenly applied on the surface and then it is placed on a honeycomb tray and the sintering program that matches the porcelain block is selected and sintering is completed.

2. Step Sintering Method

- ❖ Place the polished restoration directly on the honeycomb tray after cleaning and crystalize using a matching



SINTERING CYCLE



- ❖ Apply stain/glaze evenly on the surface of the crystallized restoration and place it on a honeycomb tray and sinter it through the glazing process.

Note: if the surface does not meet the requirements after the first sintering, it can be re-glazed. All procedures do not require vacuuming and the sintering process can be used in conjunction with sintering paste.

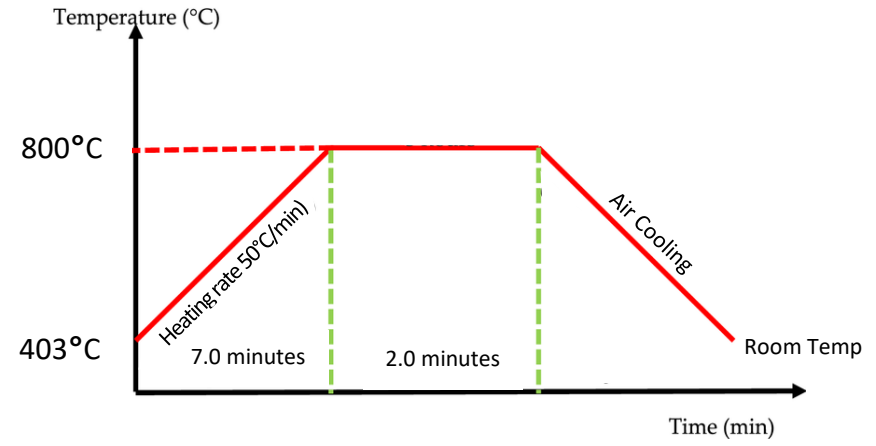


General sintering program recommendations—different sintering furnaces have differing temperature deviations, and need to be fine-tuned according to actual conditions.

- ❖ Sintering recommendations for transparent series and all HT bleached porcelain blocks (except original HT-OM1: overall time is about 20 minutes.
 1. Start at 403°C
 2. Dry for 2 minutes
 3. Heat up at a rate of 30°C/min for about 14 minutes (840 sec)
 4. Heat up to 827°C
 5. Keep for 4 minutes (240 sec)
 6. Finally, open the cover naturally and use air cooling.

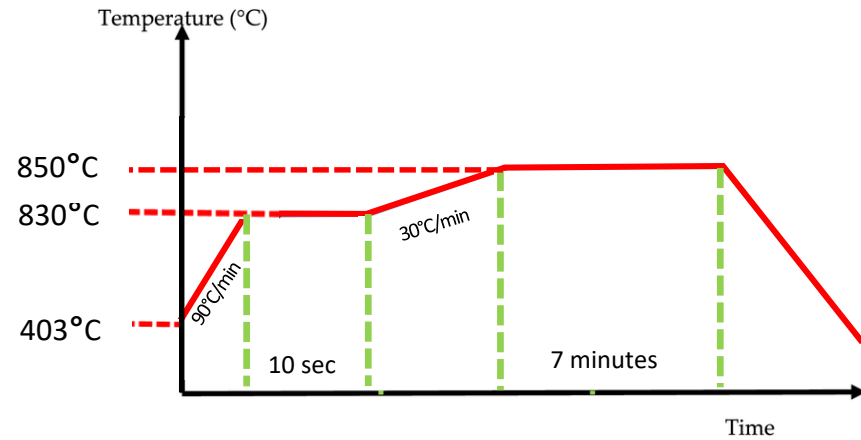
If the step-by-step method is adopted, the glazing sintering method is recommended as follows:

- a. Start at 403°C
- b. Dry for 2 minutes
- c. Heat up at a rate of 50°C/min for about 7 minutes (420 sec)
- d. Heat up to 800°C
- e. Keep for 2 minutes (120 sec)
- f. Finally, open the cover naturally and use air cooling.



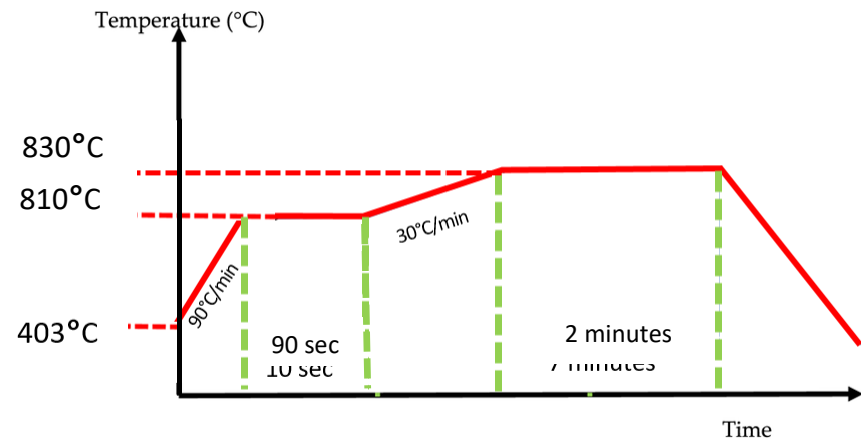
Colored ceramic blocks and MT/LT bleached series ceramic blocks sintering suggestion (the total time is about 22 minutes):

- a) Start at 403°C
- b) Dry for 2 minutes
- c) Heat up at a rate of 90°C/min for about 4.7 minutes (284 sec)
- d) Heat up to 830°C
- e) Keep for 10 seconds
- f) Heat up at a rate of 30°C/min to 850°C
- g) Keep for 7 minutes (420 seconds)
- h) Finally, open the lid naturally and use air cooling



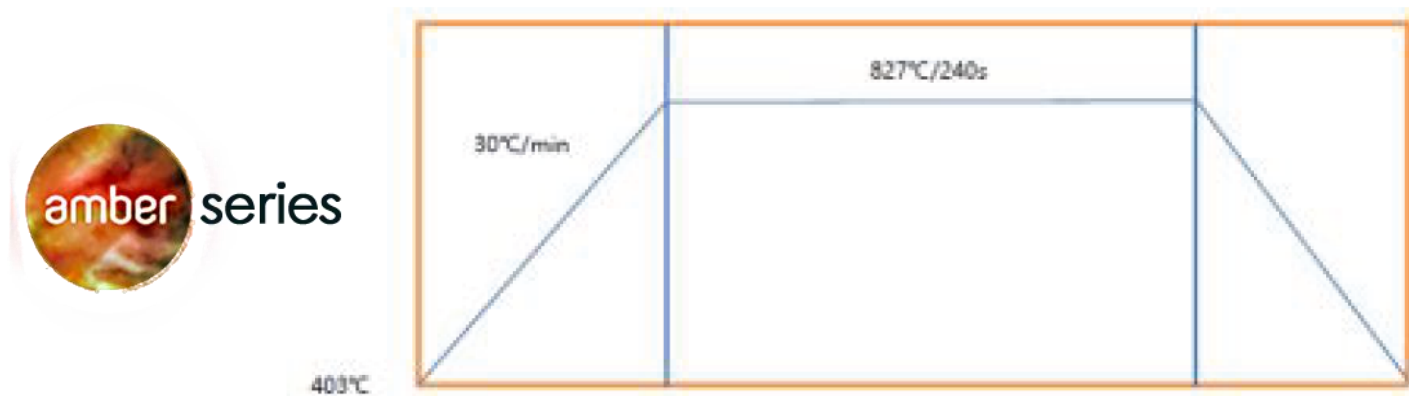
The glazing sintering procedure is recommended as follows:

- a) Start at 403°C
- b) Dry for 2 minutes
- c) Heat up at a rate of 90°C/min for about 4.5 minutes (270 seconds)
- d) Heat up to 810°C
- e) Hold for 90 seconds
- f) Heat up at a rate of 30°C/min
- g) Heat up to 830°C
- h) Hold for 2 minutes (120 seconds)
- i) Finally, open the lid naturally and use air cooling



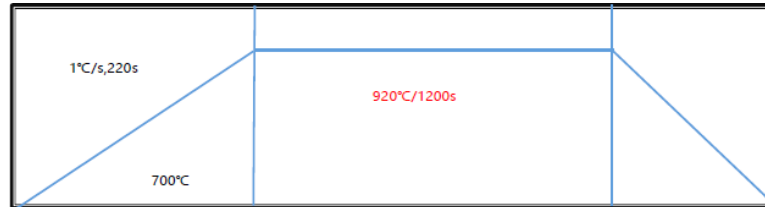
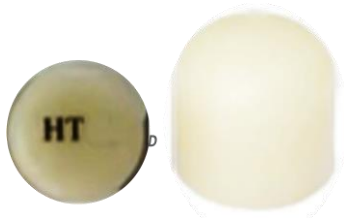
Special note: the glazing temperature can be adjusted according to the glaze instructions of different manufacturers but it must not exceed the crystallization temperature, even if it exceeds this temperature for a short time due to the hysteresis of the heating device.

4.1 Supreme® Amber Series



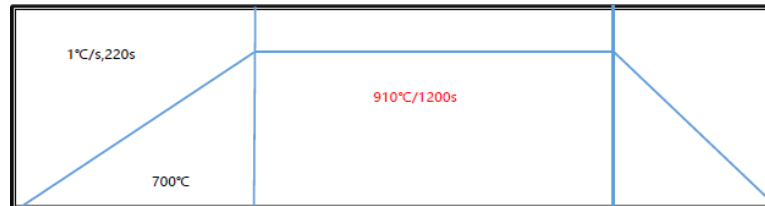
5. Supreme® IPS Standard Hot-Press Ingots

5.1, HT Series Products processing advice(stop speed at 400 µm/min)



5.2, LT Series: Products processing advice

(stop speed at 300 µm/min)



CAUTION: Take the precautions recommended by the manufacturer. No contact with hydrofluoric acid should occur with the gums, soft tissue or eyes! Follow the manufacturer's instructions for removal of hydrofluoric acid.

6. Bonding

Preparation of restorations before bonding:

- a) clean the restoration with an ultrasonic or steamer cleaner or with alcohol
- b) apply 5-10% hydrofluoric acid etching gel (supplied separately and can be used according to the manufacturer's instructions) to the bonding surface and etch for 30-60 seconds.
- c) after etching, clean and dry the restoration with air flow.
- d) It is recommended to immediately salinize the etched surface.
- e) Next to the chair, apply silane coupling agent on the bonding surface-apply it evenly and blow dry.
- f) Blow dry with strong airflow before bonding.

7. Troubleshooting

Slight edge deformation and shrinkage after sintering	Use with sintering paste. Calibrate furnace
After sintering, it is whitish, and the amount of crystallization is high	Temperature— lower the crystallization temperature by 5°C each time calibrate furnace
Gray & blue after sintering	Temperature— crystallization temperature is too low, increase the crystallization temperature by 5°C. Contact service personnel for replacement.
The porcelain block falls off the handle	Avoid accelerated cooling and direct blowing of air conditioner fans. Glazing and a small amount of porcelain can be used with high temperature cotton.
Cracks appear after glazing and sintering	Check the wear degree of the cutting needle.
When cutting, the edge appears chipped and fragmented	The cutting fluid has not been replaced for a long time or is inefficient. It is recommended to replace with new cutting fluid. If this happens frequently in the same batch, contact sales/service personnel.