Comparison of essential processing steps for glass ceramics

**VITA SUPRINITY® PC**

1. Design
   - Minimum wall thickness

   For more information, see VITA SUPRINITY PC Working Instructions No. 1951 at [www.vita-zahnfabrik.com](http://www.vita-zahnfabrik.com)

2. Finishing the crown

   Whenever possible, adjustments of VITA SUPRINITY PC restorations should always be performed in the partially crystallized condition.
   - Use only suitable milling tools, low speed and little pressure to avoid overheating in some areas.

   ![Image of milling tools]

3. Checking the fit

   Check the fit on the die using visual control; adjust the fit if required.

   ![Image of die with fit check]

4. Cleaning the crown

   Use steam jet and/or ultrasonic bath to remove grinding particles and any contamination from occlusion paper.
   - Avoid localized heat during cleaning with steam.
   - Do not sandblast with Al₂O₃ or abrasive beads.

   ![Image of cleaning process]

5. Firing trays

   Place crown on platinum pin and put on the honeycomb tray.
   - If the crown is loose: Use small quantity of VITA Firing Paste to fix the crown on the platinum pin.
   - Ceramic pin: Avoid any contact with the crown!
   - VITA FIRING PASTE has to surround the pin.

   ![Image of firing tray and pins]

**IPS e.max® CAD**

If possible, carry out grinding adjustments of IPS e.max CAD restorations while they are still in their pre-crystallized (blue) state.

- For finishing and adjusting IPS e.max CAD, only use suitable grinding instruments.
- If unsuitable grinding instruments are used, chipping of the edges and local overheating may occur (observe the Ivoclar Vivadent Flow Chart «Recommended grinding tools for IPS e.max glass ceramics»).

For more information, see IPS e.max CAD Instructions for use at [www.ivoclarvivadent.com](http://www.ivoclarvivadent.com)

If possible, check the fit by seating the crown on the die.

Always clean the restoration with ultrasound in a water bath or blast with the steam jet before crystallization.
- Do not blast with Al₂O₃ or glass polishing beads.

Fill crown with IPS Object Fix Putty and/or Flow, select the largest possible IPS e.max CAD Crystallization Pin, use a plastic spatula to smooth the Object Fix material after placing the pin, clean off any possible contamination with a brush dampened with water and then place it on the IPS e.max CAD Crystallization Tray.
Comparison of processing steps for glass ceramics

### VITA SUPRINITY® PC

#### VITA VACUMAT

<table>
<thead>
<tr>
<th>Predry. °C</th>
<th><em>min.</em></th>
<th>°C/min.</th>
<th>T °C</th>
<th><em>min.</em></th>
<th>VAC <em>°C</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>4.00</td>
<td>8.00</td>
<td>55</td>
<td>8.00</td>
<td>8.00</td>
</tr>
</tbody>
</table>

* The firing chamber must not be opened during long-term cooling.

#### Programat Ivoclar Vivadent

<table>
<thead>
<tr>
<th>B [°C]</th>
<th>S [min.]</th>
<th>t [°C/min.]</th>
<th>T [°C]</th>
<th>H [min.]</th>
<th>Vac. 1 [°C]/Vac. 2 [°C]</th>
<th>L [°C]</th>
<th>tl*</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>4.00</td>
<td>55</td>
<td>840</td>
<td>8.00</td>
<td>410 / 839</td>
<td>680</td>
<td>0</td>
</tr>
</tbody>
</table>

* The firing chamber must not be opened during long-term cooling.

### IPS e.max® CAD crystallization LT, MT, HT

#### Firing units

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>P300</td>
<td>403</td>
<td>6.00</td>
<td>90</td>
<td>820</td>
<td>0.10</td>
<td>30</td>
<td>840</td>
<td>7.00</td>
<td>550/820</td>
<td>820/840</td>
<td>700</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>P500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P310</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P510</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P710</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### IPS e.max® CAD

- IPS e.max CAD Crystall./Glaze Spray
- IPS e.max CAD Crystall./Shades
- IPS e.max CAD Crystall./Stains
- IPS e.max CAD Crystall./Glaze Paste

### VITA SUPRINITY® PC

#### VITA AKZENT Plus glaze materials and stains available as powder, paste or spray.

**Note:** Avoid exposing the firing objects to drafts; long-term cooling may be required.

Extend preheating time (____ min.) by 2 min when using VITA AKZENT Plus Paste.

### IPS e.max® CAD

#### VITA AKZENT Plus Stains

**Note:** Avoid exposing the firing objects to drafts; long-term cooling may be required.

Extend preheating time (____ min.) by 2 min when using VITA AKZENT Plus Paste.

**Information provided in VITA SUPRINITY PC Working Instructions, No. 1951, from version V04**

**Information provided in the Instructions for Use**

IPS e.max CAD Monolithic Solution Labsite, Version 2015-10, Rev. 1