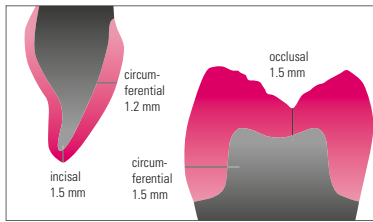


# Comparison of essential processing steps for glass ceramics

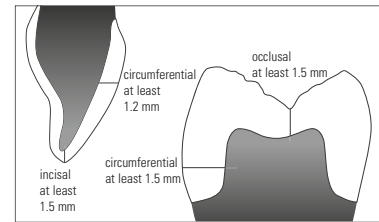
**1.**  
Design  
Minimum wall  
thickness

## VITA SUPRINITY® PC



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

## IPS e.max® CAD



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

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»).

**3.**  
Checking the fit



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



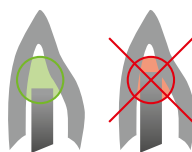
Check the fit by seating the crown on the die.

**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  $Al_2O_3$  or abrasive beads.

Always clean the restoration with ultrasound in a water bath or blast with the steam jet before crystallization. Do not blast with  $Al_2O_3$  or glass polishing beads.

**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.



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

### 6.

Firing table  
Crystallization

### VITA SUPRINITY® PC

#### VITA VACUMAT

Predry. °C	min.	min.	°C/min.	T °C	min.	VAC min.	°C*
400	4.00	8.00	55	840	8.00	8.00	680

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

#### Programat Ivoclar Vivadent

B [°C]	S [min.]	t [°C/min.]	T [°C]	H [min.]	Vac. 1 [°C]/ Vac. 2 [°C]	L [°C]	tL*
400	4.00	55	840	8.00	410 / 839	680	0

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

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

Firing units Programat	Stand-by temperature B [°C]	Closing time S [min]	Heating rate t <sub>1</sub> [°C/min]	Firing temperature T <sub>1</sub> [°C]	Holding time H <sub>1</sub> [min]	Heating rate t <sub>2</sub> [°C/min]	Firing temperature T <sub>2</sub> [°C]	Holding time H <sub>2</sub> [min]	Vacuum 1 1, [°C] 1 <sub>2</sub> [°C]	Vacuum 2 2, [°C] 2 <sub>2</sub> [°C]	Long-term cooling L [°C]	Cooling rate t <sub>1</sub> [°C/min]
P300 P500 P700	403	6:00	90	820	0:10	30	840	7:00	550/820	820/840	700	0
P310 P510 P710	403	6:00	90	830	0:10	30	850	7:00	550/830	830/850	710	0
CS/CS2/CS3	<b>Program 1</b>											

### 7.

Combination firing:  
Glaze firing and  
crystallization firing  
in one step

### 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.

VITA AKZENT Plus GLAZE LT

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.

### 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

IPS e.max CAD Crystall./Shades

IPS e.max CAD Crystall./Stains

IPS e.max CAD Crystall./Glaze Paste

or

IPS Ivocolor Essence

IPS Ivocolor Shades

IPS Ivocolor Glaze Paste/FLUO, Glaze Powder/FLUO

### 8.

Stains/glaze firing  
after crystallization

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

# VITA

VITA Zahnfabrik H. Rauter GmbH & Co. KG · Spitalgasse 3 · D-79713 Bad Säckingen · Germany  
Tel. +49/7761/562-0 · Fax +49/7761/562-299 · www.vita-zahnfabrik.com