# **Programat**<sup>®</sup> FURNACE UPDATE



### EP 3000 & EP 5000 Models

### **Guidelines to Optimized Pressing**



#### Do I need a dedicated circuit for my Programat Furnace?

Yes! The EP 3000 & EP 5000 models are designed to perform optimally with standard voltage input. Fluctuations in voltage and draw from other equipment can alter the furnace's performance.



## How often do I need to calibrate my furnace?

We recommend calibrating your furnace every 50 Press cycles.





## Which software version is installed on my furnace?

To ensure optimal performance, the latest software version should be utilized. All software downloads can be found by visiting the Download Center online at **ivoclarvivadent.com** 



### What should the length of my sprue be?



The proper length for a sprue is 3-8mm. Sprues should be attached thick-to-thin to ensure proper flow direction and the

combined length of the wax-up and sprue should not exceed 16mm.

#### Why are the wax patterns placed on the sprue base at a 45-60° angle?



Restorations should be sprued at 45-60° so they sit in the 'hot zone' of the ring. The IPS e.max Sprue Guide should be used to verify proper sprue positioning. Note: Spruing with the margins up helps

to move the pattern outward into a more uniform heat zone and adds the benefit of easier investing. Also, for full contour restorations, it can be advantageous to place the margins up to ensure material does not have to flow back to the center of the ring as material fills the occlusal morphology.



### Which investment material should I be using?

Press parameters in Programat furnaces are developed for processing in PressVEST or PressVEST Speed investment. Some



investments are higher in density and therefore, do not transfer heat in the same manner. The basic rule: The higher the density, the lower the temperature in the center of the ring. Also, be sure to adhere to the proper mixing/setting times and burnout schedule. For predictable press results the PressVest investment is recommended.



#### Should I use an Alox plunger or a disposable plunger?

Press parameters in Programat furnaces are

developed using Alox plungers. If disposable plungers are used, the temperature profile in the ring may be altered due to their lower density. Additionally, the dimensions of after-market plungers from other manufacturers can vary, leading to loose or tight fit in the investment mold. The most predictable results are achieved using an Alox plunger that has been treated with the plunger separator.



#### What is the maximum time that should elapse between taking the ring out of the burnout oven and loading it into the press furnace?

The ring should be inserted into the press furnace as quickly as possible to avoid significant cooling of the investment. This step should take a maximum of 30 seconds. If your burnout oven is in a different room than the press furnace, for example, your ring is losing too much heat and could result in a short pressing.



### Does burnout furnace calibration affect the press result?

The pressing parameters have been set based upon a known starting temperature from the burnout oven of 1562° F (850° C). Any deviation in this starting temperature can affect the pressing result. Possible defects include excessive reaction layer, short pressings, and optical changes to the shade or translucency.

For additional information, please see Instructions for Use.

