

Authentic Porcelain: Vario Press 300 using I-press Mode

Ring Size	Start Temp	Heat Rate	Final Temp	Hold Time	Extra Press Time	Max Press Time	Pressure	Vacuum Level	Opening Time
100 gm	700° C	60° C	930° C	18:00	0:00	10:00	Low	730mm	0:00
200 gm	700° C	60° C	940° C	20:00	0:00	10:00	Low	730mm	0:00
300 gm	700° C	60° C	950° C	25:00	1:00	15:00	Low	730mm	0:00

Authentic Porcelain: IntraTech/ Whip Mix Pro-Press 100 and similar (timed press)

Ring Size	Entry Temp	Start Vacuum	Rate of Climb	High Temp	Hold Time	Press Time	Release vacuum	Pressure
100 gm	700° C 1292° F	700° C 1292° F	60°C 108° F	940°C 1724°F	20 min	6 min*	940° C 1724° F	4.5 bar 68 psi
200 gm	700°C 1292° F	700° C 1292° F	60°C 108° F	940°C 1724° F	20 min	8 min*	940° C 1724°F	4.5 bar 68 psi
300 gm	700° C 1292° F	700° C 1292° F	50°C 90° F	960°C 1760° F	30 min	10 min*	960° C 1760°F	4.5 bar 68 psi

* These pressing times are recommendations and may vary. Re-press time function on some furnaces is part of the total pressing time. Each ring may require more or less pressing time depending upon the size and number of patterns. Contact Jensen Technical Support for guidance.

Above are two basic firing charts for Authentic ingots. All the different Authentic ingots press at the same temperatures, simplifying use.

PRESSING TIPS:

Most common pressing furnaces do not have a platinum thermocouple. They may be as much as 20°C off calibration and the “press-to-failure” test outlined below is an easy way to insure correct pressing temperature.

FINDING THE OPTIMAL PRESSING TEMPERATURE

Perform the “press-to-failure” test

1. Use ingot recommendations for pressing parameters
2. Drop temperature 5-10°C with successive pressing tests
 - When short press occurs, previous pressing temperature is optimal pressing temperature
 - If short press occurs on first pressing test, reverse the procedure until complete pressing occur and this will be the optimal pressing temperature for all-ceramic pressing

TEMPERATURE RELATED VISUAL INDICATORS AUTHENTIC[®] EXHIBITS IN MOST COMMONLY USED PRESSING FURNACES:

TEMPERATURE	VISUAL INDICATORS
Too Low Temperature	Short Pressing, rounded pressing edges
Correct Temperature	Complete pressing, correct shade and opacity
10-15°C too high	Slightly lower value, less opaque
15-25°C too high	Quite grey, losing shade, becoming translucent
25-35°C too high	As above, and possible formation of air bubbles in sprues/sprue junction into unit
40 +°C too high	Fins forming up sprue length and eventual ring failure (fins/failure can occur without seeing formation of air bubbles)

NOTE: Commonly used pressing furnaces can fall out of calibration after continued use. It would be wise to document usage of your pressing oven and periodically run press checks. A good rule of thumb would be after 50+ pressings.

For additional information visit us at www.jensendental.com and click onto Authentic porcelain or call our friendly technical support staff for further guidance.

