

## Best press results.

### General recommendations for press furnaces.

- The pressing temperature should be as low as possible.
- The pressure should be as low as possible.
- The pressing time should be as short as possible.
- The holding time should not be less than 20 mins.
- The furnace must be preheated sufficiently before pressing begins.

### Effects of the different parameters on the result.

#### Final temperature too high

- Significant reaction layer (high blasting effort).
- The surface is less smooth.

#### Final temperature too low

- Object has not been completely pressed.
- The more massive the object, the higher the temperature (in contrast to metal casting).

#### Pressure

- Should not be too high (surface quality).
- Depends on the furnace and the mechanism used to generate pressure.

#### Pressing time

- Should not exceed the recommended 2 minutes (surface quality).
- Most furnaces stop automatically.

#### Holding time

- Should not be less than the recommended 20 minutes.
- Changing the holding time may have an influence on physical properties such as the coefficient of thermal expansion, the color and translucency.

#### General

- Use press plungers (REF 260-365-13) for pressing investment material.
- Note the processing instructions from the manufacturer of the investment material.  
Take particular care to adhere to times stated for mixing and setting.

Ivoclar Programat EP 3000 (200g casting ring <sup>1</sup> )				
Entry temperature <b>B</b>	Temperature increase <b>t</b>	Holding temperature <b>T</b>	Holding time <b>H</b>	Abort speed <b>E</b>
700 °C (1292 °F)	60 °C (140 °F)/min	890 °C (1634 °F)	20 mins	250 μ

Dentsply Multimat NTX press (200g casting ring <sup>1</sup> )					
Temperature at start	Pressing temperature	Holding time	Pressing pressure <sup>(2)</sup>	Pressing time	Vacuum hold-time
800 °C (1472 °F)	915 °C (1679 °F)	20 mins	2 bar	1 min	21 mins

Dekema Austromat 644 (200g casting ring <sup>1</sup> )						
Temperature at start	Heat rate	Temperature	Holding time	Pressing	Pressing time	Pressing level
800 °C (1472 °F)	60 °C (140 °F)/min	910 °C (1670 °F)	20 mins	Auto 1 <sup>(3)</sup>	00:30 min	5

Dekema 654 Press-i-dent (200g casting ring <sup>1</sup> )						
Temperature at start	Heat rate	Temperature	Holding time	Pressing	Pressing time	Pressing level
800 °C (1472 °F)	60 °C (140 °F)/min	910 °C (1670 °F)	20 mins	Auto 1 <sup>(3)</sup>	00:00 min	6

Dekema Austromat 3001 Press-i-dent (200g casting ring <sup>1</sup> )												
L9	C800	V9	T060.C905	T1200	L98	T120	V0	C0	L6	T5	C800	L0

Zubler pressing furnace Vario Press 300 (200g casting ring <sup>1</sup> )							
Temperature at start	Heat rate	Temperature	Holding time	Pressing time	Pressing pressure	Vacuum level	Opening time
800 °C (1472 °F)	60 °C (140 °F)/min	905 °C (1661 °F)	20 mins	2 mins	High	730 mm	00:00

<sup>1</sup> Reduce temperature by 5 °C / 41 °F for 100 g casting rings!  
<sup>2</sup> Pressure is factory-set at 2.7 bar. This can be reduced to 2 bar if required.  
<sup>3</sup> Auto 1 = Standard pressing time for lithium disilicate.