

**VARIO PRESS<sup>®</sup> 300/300.e/300.eZR**

# VARIO PRESS® 300/300.e/300.eZR

*Developed as a press oven  
and outstanding as a ceramic oven!*

## *Special pressing process for lithium disilicate*



### **Touch Glass Display Made of Safety Glass**

The innovative and modern touch glass display is made of impact and heat-resistant safety glass. This has proven to be a clean, comfortable and virtually indestructible solution when compared with a membrane keyboard.

We now offer a **LIFETIME WARRANTY** on the glass!



### **TTC-MODE** *enables linear cooling\**

The ingenious software and the lift technology enable a linear cooling process when in TTC mode: this prevents chipping, micro-fractures and cracks in zirconia ceramics.

\* Available only in the VARIO PRESS 300.eZR version.



### **ADVANCED PRESS™ Process\***

The ADVANCED PRESS™ process ensures a uniform temperature distribution from the temperature sensor of the press furnace to the inside of the press ring.

Pressing always takes place within the ideal temperature range for pressing lithium disilicate. Thus hardly any reaction layer is created on the surface. This is enhanced by an extremely short press time.

The result is a smooth surface and an enormous time savings!

\* Available only in the VARIO PRESS 300.e/300.eZR version.



### **Z-Dry Mode** *Effective and time-saving*

A virtual sensor adjusts the lift position based on the temperature in the firing chamber and automatically ensures an ideal and constant pre-drying temperature. This feature saves time from the traditional methodology and is much more accurate.



### **Uniform Ring Heating**

This simple insert helps counteract the heat loss experience by conventional press ovens by raising the ring up to evenly expose the entire ring to the heating elements. The ring sits on the tripod inside the firing chamber throughout the entire process.



### **USB Connection**

Simple data transfer and program backup.

# VARIO PRESS® 300.e / 300.eZR

*with special technology  
for processing lithium disilicate ceramics!*



**ADVANCED  
PRESS™**



## ADVANCED PRESS™ Process

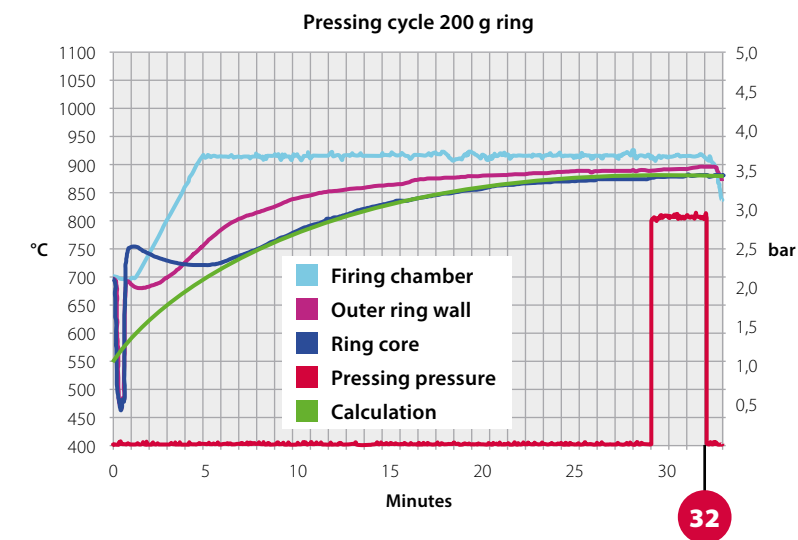
Lithium disilicate ceramics are increasingly used in the dental laboratory for the manufacture of dental prosthesis. This material is characterized by its high strength. While CAD/CAM processing is an option, pressing technology is more efficient and accessible.

Unfortunately, the pressing process has been hindered by the sensitive nature of lithium disilicate and the formation of reactive layers caused by the material's exposure to phosphate bonded investment during the traditional heating and pressing process. This reaction layer adds complexity and increases processing time.

**ADVANCED PRESS™** includes an entirely new pressing process. By calculating the thermal behavior between the materials involved in the pressing cycle, a heating curve was developed that vastly improves the result and decreases the process time. The principle is simple and easy to understand.

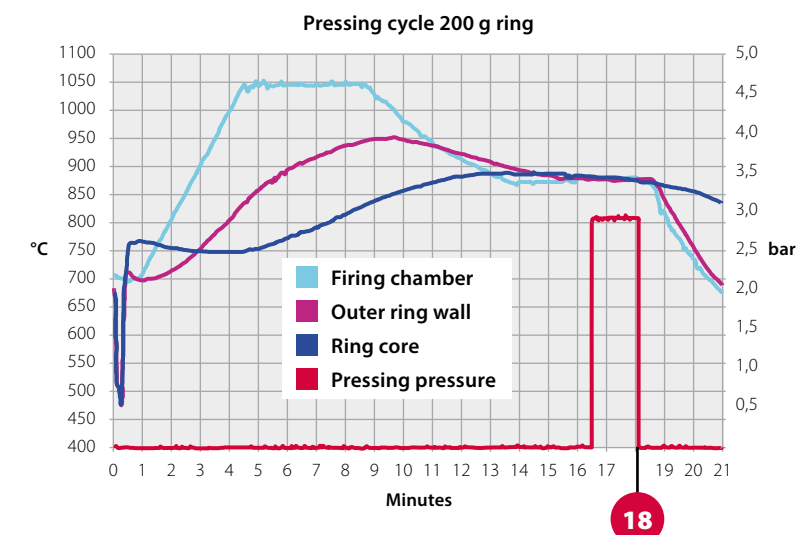
## Standard Pressing Process:

The graph depicts the standard temperature difference between the interior of the ring and the chamber during a traditional press cycle, approximately 40°C. The vast temperature difference between the ideal pressing temperature for lithium disilicate in the ring core and the high temperature in outer regions of the ring, where the pressing objects are usually located, leads to a very distinct reaction layer. This effect is exacerbated by a lengthy hold time and a long press time. The result is a rough surface sometimes accompanied by an "orange peel" texture and laborious finishing work.



## ADVANCED PRESS™ Process

The graph shows the homogeneous temperature distribution from the temperature sensor of the press furnace to the interior of the ring. The maximum temperature difference is 4°C. This ensures that all objects, irrespective of their position in the ring, are pressed at the ideal pressing temperature. The formation of a reaction layer is reduced to a minimum and the extremely short pressing time further enhances this effect. The results of the ADVANCED PRESS™ are smooth and homogeneous surfaces along with an enormous time savings.





# VARIO PRESS® 300.eZR

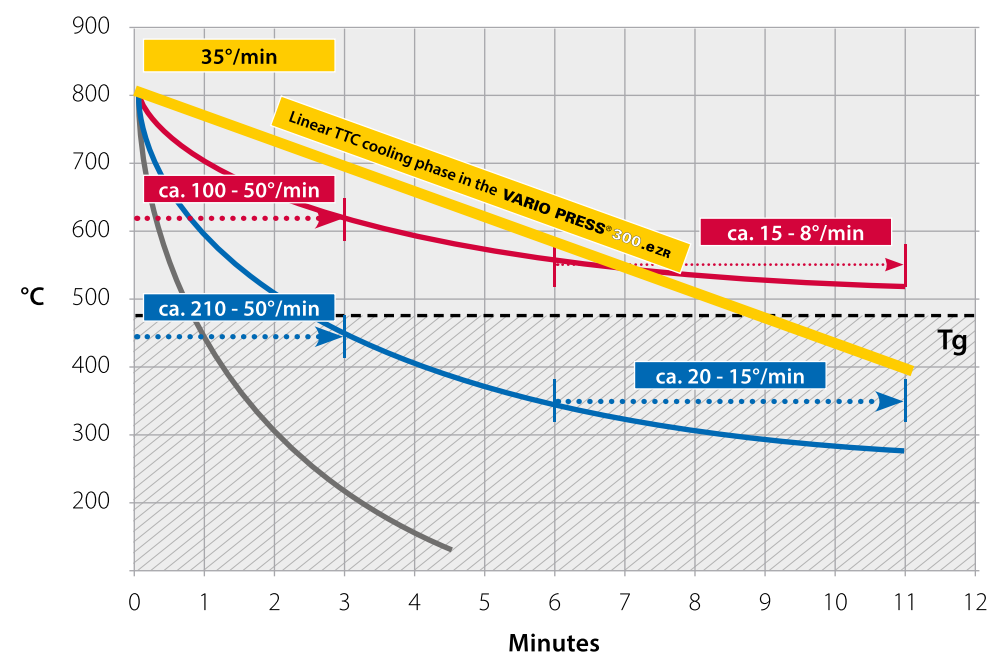
Linear cooling thanks to an innovative technology and intelligent software!



## TTC SYSTEM

The firing of dental ceramics on zirconia sub-structures carries a high risk of crack formation while cooling. With the VARIO PRESS 300.eZR the new TTC technology is at your disposal.

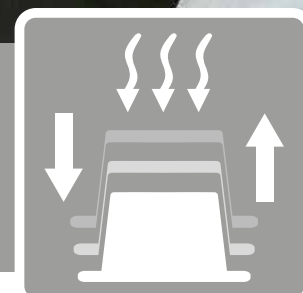
When engaged, this feature controls the rate of temperature descent, linearly dropping the temperature by a user defined degree per minute. This feature allows for cool rates between 5 °C/min and 45 °C/min. Thanks to the innovative lift technology and intelligent software, the actively controlled temperature descent of the ceramic below the temperature of transition is ensured. This process will reduce the risk of chipping, cracking and micro-fractures to a minimum.



Cooling phase

- Linear 35 °C/min
- Closed chamber
- Opening in 6 min
- Fast opening

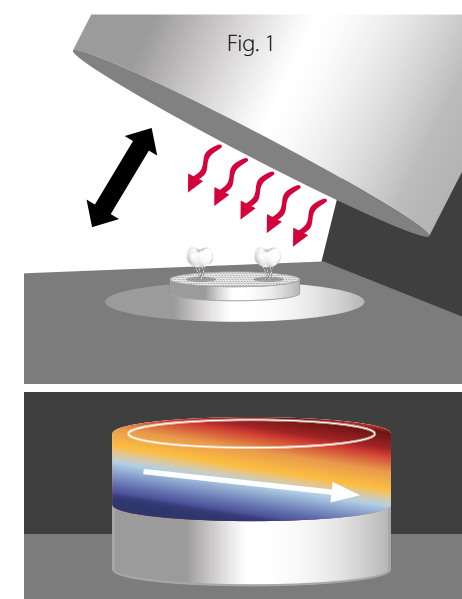
Effective and Time-saving



## Z-Dry Mode

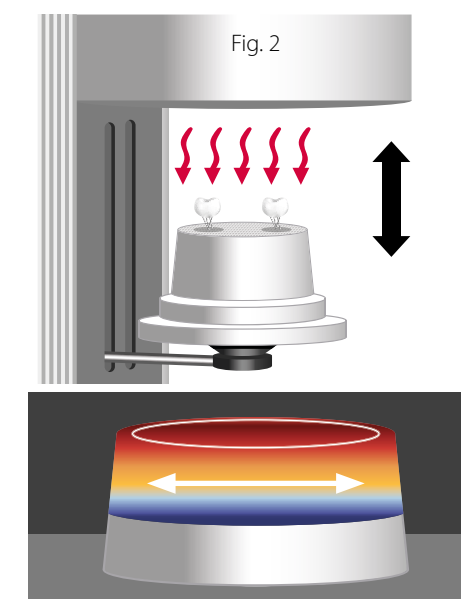
For optimal pre-drying, to avoid cracks and blisters, it is best to pre-dry at a constant temperature of 130°C. Utilizing the symmetrical lift design, chamber temperature and lift position, the VARIO PRESS 300/300.e/300.e ZR maintains the optimal pre-dry temperature. By reading the chamber temperature, the VARIO PRESS 300/300.e/300.e ZR will adjust the lift to compensate for any changes in the radiant temperature. **The advantages:**

- Cracks or blisters are prevented by controlled drying with the Z-Dry Mode.
- In subsequent firings you save wait-time thanks to the Z-Dry Mode. The work can be placed on the firing tray well before the programmed start temperature has been attained.



"Shell-like" asymmetrical closing mechanism:

Uneven heat distribution to the objects  
- Uneven temperature distribution on the firing tray.



Vertical, symmetrical closing mechanism:

Even heat distribution to the objects  
- Even temperature distribution on the firing tray.



# PRESS CERAMIC OVENS



**VP 300**



**VP 300.e**



**VP 300.eZR**

Dental Ceramic oven			
Dental Ceramic Press oven			
ADVANCED PRESS™ process for lithium disilicate ceramics			
Intelligent press (i-press)			
Z-Dry Mode (pre drying at a constant temperature)			
TTC System for a linear active cooling (5°C/min – 45 °C/min)			
2-step programs with two free programmable heat rates and holding times			
2-step programs with TTC cooling mode			
USB connection			
Impact and heat-resistant LCD glass touch display			
Working tools (ring tweezer, long tweezer, honey comb, 5 pins)			
2-year warranty			

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## Scope of delivery:

- 1 VP 300/300.e/300.eZR ceramic oven
- 1 Power cable
- 1 Flex-Ring ring system 100 g + 200 g
- 1 Pressing tray with tripod Insert
- 1 Firing tray
- 1 Vacuum hose incl. inline filter
- 1 Compressed air hose 2 m
- 1 Ring tongs
- 1 Tweezers, long
- 1 Spare fuse
- 1 USB flash drive
- 1 User's manual
- 1 Sample of disposable plungers 13 mm

## Technical data:

Dimensions (B x H x D)	360 mm x 765 mm x 425 mm
Weight	27 kg
Voltage	100 V/115 V/230 V/240V ~ 50/60Hz
Power	1300 W

## Accessories:

- 1 Vacuum pump P3
- 1 Pump connection cable P3



Subject to technical changes.

Distributed by:



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