

## VARIO PRESS®330.e/330.eZR



### **VARIO PRESS®330 Series**

Designed as a pressing furnace, excellent as a firing oven!



# Completely automatic, dynamic pressing power control

The electronically controlled pressing power regulation recognizes the required pressing forces during the working process, depending on the geometry of the objects to be pressed. In the case of different volumes or thicknesses, the VARIOPRESS 330 regulates the pressing power automatically and dynamically during the entire working process. Finishing the pressing process too early with the consequent defects on the pressed objects is nearly impossible.



## ADVANCED PRESS<sup>™</sup> process

The ADVANCED PRESS™ process ensures a uniform temperature distribution from the temperature sensor of the pressing furnace to the inside of the press ring. Pressing always takes place within the ideal temperature range for pressing lithium disilicate. As a result, this technology ensures perfect surfaces, minimal reaction layers and extremely short pressing times.



### **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 of about 150°C on the entire surface of the tray. This process prevents the ceramic from cracks or bubbles.







# Full touch display and intuitive menu navigation

The VARIO PRESS 330 presents itself with a large and wellarranged full touch display. The modern and contemporary menu navigation represents more efficiency and operating comfort. Whether editing for one-time a running programme or permanently changing the programme parameters

- working with the VARIO PRESS 330 proves to be child's play.



## TTC Mode for linear cooling\*

The ingenious software and the lift technology enable a linear cooling process when in TTC mode: In this programme, the user determines the freely selectable cooling rate after firing.

Cracks in the ceramic or the dreaded "chipping" are a thing of the past.

\* available only in the VARIO PRESS 330.e ZR.



## **USB Port Download Service Centre**

After the successful registration of your VARIO PRESS 330 pressing furnace in the service area of our Zubler homepage, you have access to our extensive database. To download various programmes for all dental ceramics on the market and the current software version for your pressing furnace - simply log in and download.

In addition to the extended warranty, you will receive all services in the download centre and you will always be technically up-to-date.

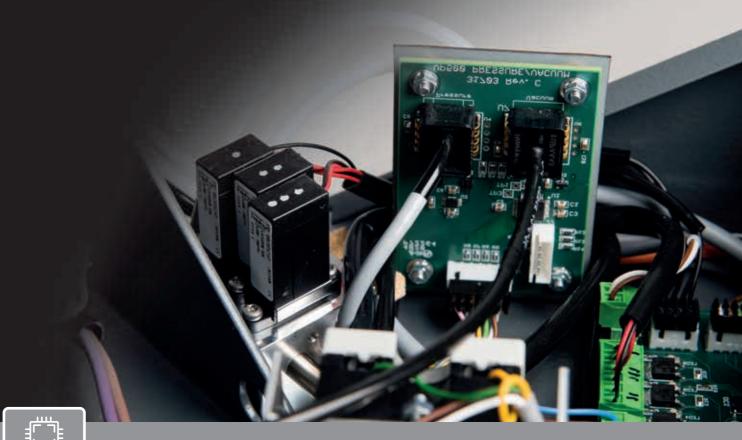


#### Full touch display and intuitive menu navigation

The handling of the furnace was developed according to the requirements of modern dental technology. Each firing or pressing programme can be created very easily and intuitively for the used technique. Programmes are archived in folders similar to those of a computer and can be called up individually for each product or user.

During a running programme the display - made of high-quality safety glass - shows the most important parameters as well as a real-time parameter. The large 12-inch display with LED backlighting allows you to read the programme progress even from a greater distance or from an unfavourable angle. If temporary changes to the parameters are required during a running programme, they can be made directly on the touch display. A pop-up window opens and all parameters that you can change during the running programme are shown on the display. At the end of the programme, all parameters are reset to their original values.

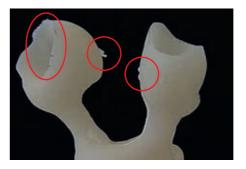
These and many other useful features are an important element in the modern dental laboratory and allow the dental technician to work comfortably and efficiently with the new VARIO PRESS 330 pressing and firing furnace.



Fully automatic, dynamic pressing power control

The electronic of the furnace controls the press valves by intelligent software. Manual adjustment of the working pressure is no longer necessary. The VP 330 is therefore capable to adjust the pressing power dynamically during the pressing process. For the user, this provides even better pressing results due to two key advantages:

- 1. The furnace can now react to pressure fluctuations that happen on the compressed air line in the daily work of a lab and maintain the ideal pressing power. A system that works with analogue press valves works statically and compressed air fluctuations can cause mispressing due to their direct influence on the pressing process.
- 2. The furnace adjusts the pressure depending on the flow speed of the press ceramic. This function significantly reduces the load on the investment ring structure. Since dental restorations never have a uniform layer thickness due to their anatomy, but rather thinner and thicker sections, the flow velocity changes during the pressing process. A conventional furnace with analogue press valves will always apply the same pressing power, which may lead to cracking of the investment ring structure and therefore to press marks (Fig. 1). The fully automatic dynamic pressing power control increases the press quality and precision even more, as cracking in the investment ring is excluded (picture 2).



Picture 1 - Press marks due to cracks in the investment ring

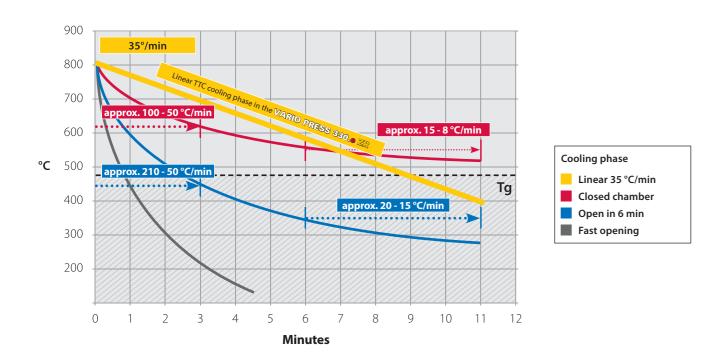


Picture 2 - Perfect pressing



The firing of dental ceramics on zirconia sub-structures carries a high risk of crack formation while cooling. With the VARIO PRESS 330.e ZR, the new TTC technology is available to you.

In this process, a linear, controlled cooling is possible by specifying a temperature gradient between 5°C/min and 45°C/min within a firing programme. Thanks to the innovative design of the outer firing chamber and an intelligent software, an actively controlled return of the ceramic to the temperature range below the glass point is guaranteed. This reduces the risk of cracks and the dreaded "chipping" of the dental ceramics used is reduced to a minimum.







Standard Press

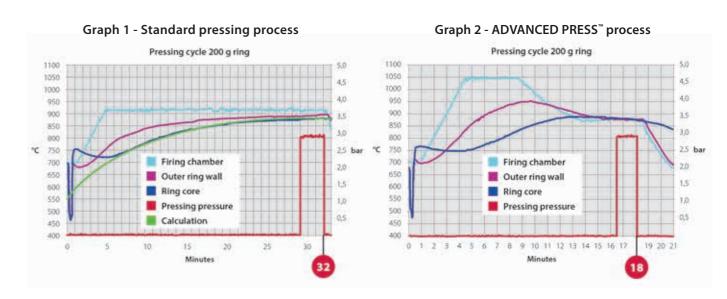
ADVANCED PRESS™



#### **ADVANCED PRESS™ Verfahren**

Graph 1 shows the temperature difference of approximately 40°C between the set temperature in the pressing furnace and the inside temperature of the ring during standard pressing. The high temperature difference between the ideal press temperature for lithium disilicate in the ring core and the high temperature in the outside area of the ring, where the pressed objects are usually located, leads to a strongly pronounced reaction layer. This effect is reinforced by the long holding and pressing time. The result is a rough surface (orange peel) and time-consuming, laborious finishing.

Graph 2 shows the homogeneous temperature distribution from the thermal sensor of the pressing furnace to the inside of the ring. There is a maximum temperature difference of 4°C. This ensures that all objects, regardless of their position in the ring, are pressed in the ideal pressing temperature range for lithium disilicate. The formation of a reaction layer is reduced to a minimum, and the extremely short pressing time further supports this effect. Smooth, homogeneous surfaces as well as enormous time saving in finishing and finalising the restoration are the result of ADVANCED PRESS™.







**VARIO PRESS®** 

**VARIO PRESS®** 330.eZF

#### **Product overview:**

Dental ceramic firing furnace	•	•
Dental ceramic pressing furnace	•	•
ADVANCED PRESS™ process for lithium disilicate ceramics	•	•
Intelligent Press (i-press)	•	•
Z-Drying mode (pre-drying at constant temperature)	•	•
TTC system for linear active cooling (5°C/min - 45 °C/min)		•
2-step programmes with 2 freely programmable rising rates and holding times	•	•
2-step programmes with TTC cooling mode		
USB connection	•	•
Shock and heat resistant LCD glass touch screen	•	•
Working tools (ring tongs, tweezers, firing tray, special pins)	•	•
2 years warranty	•	•

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### Scope of delivery:

- VARIO PRESS 330.e/330.e ZR
- power cord
- ring system Flex-Ring 100 g + 200 g
- set disposable press plunger Ø 13 mm
- pressing tray
- firing tray
- vacuum hose including filter
- compressed air hose 2m
- investment ring tongs
- pair of tweezers, long
- spare fuse
- USB stick
- operating instructions



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#### **Technical data:**

Dimensions (W x H x D) 360 mm x 765 mm x 425 mm

> Weight 27 kg

Voltage 230 V ~ 50/60Hz

Power 1300 W

#### **Accessories:**

- Vacuum pump P3
- Connecting cable pump P3



Subject to technical changes.

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