

# Programat<sup>®</sup> EP 5010

The intelligent press and ceramic furnace

Efficient performance.  
Excellent press  
and firing results.  
With infrared camera.



# The ideal press furnace for IPS e.max<sup>®</sup> Press

## Proven

The press furnaces from Ivoclar Vivadent are based on long-standing success. The company introduced the press technology to the dental market in 1991. Since then it has established itself as the market leader in this field, continuously satisfying customers with products of the highest quality.

## Innovative

The Programat EP 5010 is an advanced version of the Programat EP 5000, incorporating many innovative features.

## System components as a key to success

The resounding success of the Programat press furnaces is based on the fact that the furnace technology is perfectly matched to the materials of Ivoclar Vivadent. Therefore, users can fully rely on their furnaces and benefit from excellent press and firing results.



## EVEN MORE

- Multimedia functions (photos, videos, music)
- 500 individual firing programs and 20 individual press programs
- Large firing tray with separate cooling grid
- Integrated firing tong holder
- SD card reader for image transfer

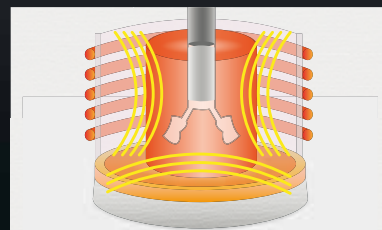


# Sets a new benchmark. With new muffle technology.

## QTK2 muffle technology with SiC bottom reflector

The new QTK2 muffle together with the SiC bottom reflector ensures optimum temperature distribution. The investment ring warms up more evenly and efficiently, which leads to quality press and firing results.

Due to the uniform temperature distribution, even difficult-to-press restorations can be processed.



Even heating of the investment ring – also in the bottom area – due to the SiC bottom reflector



Precision press results, even for very thin restorations



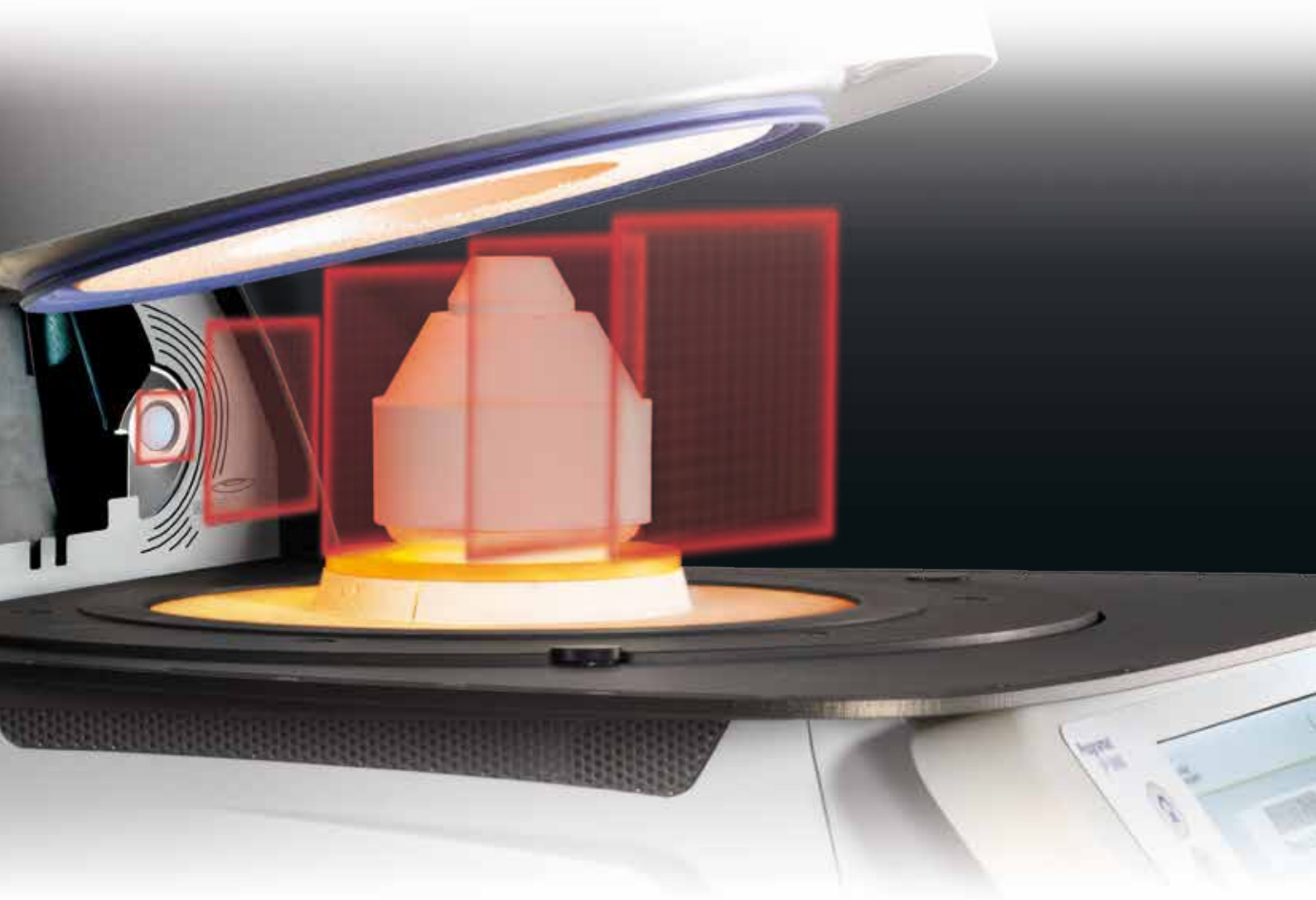
All Ivoclar Vivadent programs are already integrated and categorized according to different material groups.

# The intelligent Programat infrared technology.

## How does infrared technology work?

The innovative integrated thermographic camera measures the exact temperature at the surface of the fired object and the investment ring. This technology opens up a host of new possibilities for controlling the predrying processes in the firing

of ceramic objects. In the pressing mode, the temperature and size of the investment ring is measured fully automatically and contact-free. This technology increases the convenience and process reliability of press and firing procedures.



The furnace head and the heater are controlled with the IR camera. Therefore, the predefined predrying temperature is maintained on the object in the furnace.



# Measures the temperature of the fired object or the investment ring.

## Firing

### Object-related temperature measurement and predrying process

The IR camera measures the temperature at the surface of the fired object during the predrying and closing cycles. It calculates and controls the ideal predrying process.

### BENEFITS

- High level of process reliability
- High-quality firing results
- Up to 20% faster processing

## Pressing

### Contact-free temperature measurement of the investment ring

When the objects are loaded in the furnace, the IR camera checks the temperature of the preheated investment ring and adjusts the press process accordingly or indicates that the investment ring is too cold.

### BENEFITS

- Hardly any faulty results caused by cold investment rings
- The preheating furnace can be optimally coordinated with the press furnace

### Automatic recognition of the investment ring size

The IRT system automatically identifies the size of the investment ring used.

### BENEFITS

- Automatic, fast and convenient selection of the investment ring size

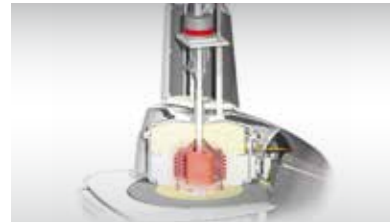


While the objects are loaded, an IR image of the investment ring is displayed.

## Further highlights

### **Electronic press drive with force sensor**

The electronic press drive with force sensor records and controls the pressure of the press plunger very precisely and therefore ensures top-quality press results. A compressed air connection is not required.



### **Crack Detection System (CDS)**

The Programat EP 5010 features the Crack Detection System (CDS). This system identifies cracks in the investment ring at an early stage and reduces the pressure, if necessary. As a result, the press process ends in time to protect the restorations.



### **Automatic double-range temperature calibration (ATK2)**

The ATK2 temperature checking system calibrates the temperature in the furnace fully automatically and at two different temperature ranges. This ensures high-precision press and firing procedures and reproducible press and firing results with various types of materials (low- and high-fusing ceramics).



### **Optical status and progress display**

The Optical Status Display (OSD) uses different colours to inform the operator about the actual operating status (red=heating, green=ready, blue=cooling).



### **Software update via USB flash drive**

It has never been easier to download software updates: Simply plug in a USB flash drive containing the latest software version and press the "Software Update" button. The software is updated automatically.



### **Convenient loading of the furnace chamber**

Upon opening, the furnace head pivots upwards and thus provides ample working space. Therefore, the furnace chamber can be loaded comfortably.



### **Remote diagnostics via Internet and e-mail**

For technical support purposes, a diagnostic data file can be generated at the push of a button and conveniently sent to one of the Ivoclar Vivadent Service Centers by e-mail. There, the matter will be attended to immediately.



# EVEN BETTER



- Double-valve vacuum technology
- Removable furnace head for easy transportation and maintenance
- Power Fail Save to bridge short power interruptions
- Variety of maintenance and diagnostic programs
- PrograBase software establishes a connection to the PC
- Data transfer via WIFI
- Selectable acoustic signals and tunes
- Stereo speaker connection for external loud speakers

## Technical data

<b>Power supply</b>	110 – 120 V / 50 – 60 Hz 200 – 240 V / 50 – 60 Hz Admissible voltage fluctuations $\pm 10\%$
<b>Max. power consumption</b>	12 A at 110 – 120 V 8.0 A at 200 – 240 V
<b>Vacuum pump data</b>	Max. power consumption: 250 W Final vacuum: < 50 mbar Only tested pumps should be used.
<b>Dimensions of closed furnace</b>	Depth: 495 mm Width: 320 mm / 395 mm (with cooling tray) Height: 550 mm
<b>Dimensions of firing chamber</b>	Diameter: 90 mm Height: 80 mm
<b>Max. firing temperature</b>	1,200 °C
<b>Weight</b>	20.5 kg
<b>Safety information</b>	The furnace is built according to the following standards: – IEC 61010 – UL and CAN/CSA
<b>Radio protection / Electromagnetic compatibility</b>	EMC tested

## Delivery form

- Programat EP 5010**  
Power cord  
Vacuum hose  
Programat Firing Tray Kit 2  
Automatic Temperature Checking Set ATK2 (test set)  
USB download cable  
Investment ring cooling grid  
Programat WLAN Kit  
Various accessories

## Recommended accessories

(not contained in the delivery form)

- VP4 or VP5 Vacuum Pump  
Programat Accessories Set  
Automatic Temperature Checking Set ATK2





## Fixed prosthetics

Programat® EP 5010 forms a part of the "Fixed Prosthetics" product category. The products of this category cover the procedure involved in the fabrication of fixed prosthetic restorations – from temporization to restoration care. The products are optimally coordinated with each other and enable successful processing and application.



### THESE ARE FURTHER PRODUCTS OF THIS CATEGORY:

## IPS e.max® System

all ceramic – all you need



The comprehensive solution covering all indications

- Highly esthetic, high-strength materials for the press and CAD/CAM technique
- Unique lithium disilicate (LS<sub>2</sub>) and zirconium oxide (ZrO<sub>2</sub>) ceramics for restorations ranging from thin veneers to long-span bridges
- Flexibility of cementation: adhesive, self-adhesive and conventional

## Multilink® Automix

The adhesive cementation system



A strong bond, proven performance

- Strong hold – both dual and self-curing
- Universal – suitable for silicate and oxide ceramics as well as metal
- Clinically proven – numerous long-term studies

Would you like to know more about the products of the "Fixed Prosthetics" category? Simply get in touch with your contact person at Ivoclar Vivadent or visit [www.ivoclarvivadent.com](http://www.ivoclarvivadent.com) for more information.

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 667790/2014-03-27/en

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