Programat® P510

The intelligent furnace

Efficient firing performance. Excellent results.

New with DSA function

INFRARED TECHNOLOGY

ivoclar vivadent®

passion vision innovation

An exciting development.

Proven
The firing and press furnaces from Ivoclar Vivadent are based on long-standing success. The company has been producing high-quality dental furnaces for discerning customers since 1976. The furnaces have been proven a thousand times over in dental settings around the world.

Innovative
The Programat® P510 has a number of innovative features. The integrated infrared technology represents a milestone in the history of dental ceramic furnaces. The use of infrared technology heightens the process reliability and speed of the device. This makes the furnace even more cost-effective.

EVEN MORE

- **Video player**
- **Image presentation**
- **MP3 player**
- **Modern signal tones**
- **Clock timer**
- **500 individual programs**
- **Vacuum Parameter Wizard (VPW)**
- **Software update via WLAN or USB flash drive**

Setting new benchmarks. With state-of-the-art technology.

Ease of operation

The Programat P510 is easy to operate by means of the large swivelling colour touchscreen. The most important functions, however, are selected on the membrane-sealed keypad.

OSD with progress indicator

The optical status display (OSD) uses different colours to inform the user about the actual operating status. (Red = Heating, Green = Ready, Blue = Cooling).

The progress indicator on the side of the screen shows the current firing status and the remaining process time. The firing status is visible even from a large distance.

All the Ivoclar Vivadent firing programs are pre-set and divided into different materials groups.

The Programat infrared technology.

The innovative Programat infrared technology helps to speed up the firing process by up to 20 percent and produce enhanced firing results compared with conventional ceramic furnaces. The new thermal imaging camera automatically controls the pre-drying and closing processes The size or number of restorations in the firing chamber is irrelevant.

How does infrared technology work?

The integrated thermographic camera detects infrared rays and measures the temperature directly at the surface of the fired object. This technology opens up a host of new possibilities for controlling the furnace drying and closing processes.

Measures the temperature of the fired object.

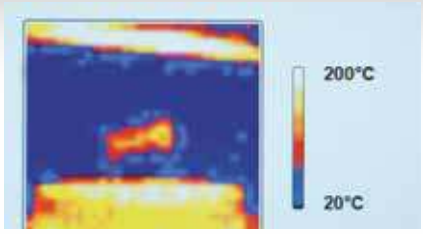
With the help of the infrared camera, the sophisticated furnace software establishes the optimum pre-drying and closing parameters for each firing cycle. As a result of this smart sensor, the furnace recognizes at which point the objects have been properly pre-dried. Any potential fluctuations in quality, which may result from the individual adjustment of the firing programs, are therefore eliminated.

THE BENEFITS

- **Reduces cracks or fractures in the ceramic**
- **High process reliability and ease of operation**
- **Consistent and reproducible high-quality firing results due to the Programat infrared technology**
- **High cost-effectiveness due to 20 percent faster firing**

The furnace head and the heater are controlled with the infrared camera. Therefore, the pre-defined pre-drying temperature is maintained on the object in the furnace.

INFRARED TECHNOLOGY



A thermal image of the object in the furnace is shown on the screen during the drying and closing processes.

NEW

DSA – Digital Shade Assistant

Digital shade analysis

Integrated in the new Programat P510 furnace, the patented Digital Shade Assistant allows reliable tooth shade determination in a snap.

Here is how it works: The software compares the shade of the tooth to be analyzed with three pre-selected shade guide teeth on the screen. Special image processing software automatically recognizes which tooth to analyze and which three shade guide teeth to use. The shade guide tooth that comes closest to the tooth that is being analyzed is shown on the tooth. No further devices are required.

It's easy:

1. Pre-select the three closest tooth shades.

2. Take a photograph of the teeth and shade guide and transfer the data to the furnace using an SD card, USB flash drive, Ethernet* or WLAN*.

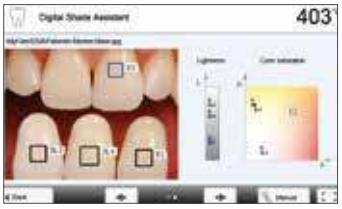
*by means of the PrograBase X10 software

3. Import the photos and start the digital tooth shade determination. The result (e.g. B1) is displayed.

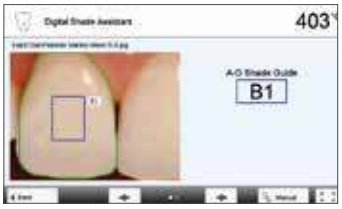
Additional features:

1. The area of reference can be individually selected.

2. Either incisal edge to incisal edge or tooth neck to incisal edge can be selected.



3. Manual analyses including brightness and shade saturation (Lab values)



4. Zoom function for a detailed view

Further highlights

QTK2 muffle technology with SiC bottom reflector

The new QTK2 muffle technology in combination with the SiC bottom reflector ensures even temperature distribution and leads to optimum firing results.

ATK2 temperature calibration

The automatic double-range temperature calibration (ATK2) enables fully automatic calibration in two temperature ranges. This ensures high firing precision.

Multi-media functions

Videos of the directions for use as well as pictures of patients and teeth can viewed on the screen of the Programat. MP3 files can also be played.

Double-valve vacuum technology

This feature reduces the noise level of the vacuum pump during operation. The vacuum pump evacuates moisture from the vacuum hose and the firing chamber.

Even better

- **Ease of maintenance due to removable furnace head**
- **Powerful heating (up to 140 °C/min.)**
- **Long service life of the muffle**
- **Smoke extraction during pre-drying**
- **Remote diagnostics via data file or Internet**
- **Power Fail Save system bridges short mains failures of up to 10 seconds**
- **LAN, USB and audio ports and integrated SD reader**
- **Variety of maintenance programs (cleaning, dehumidification, etc)**
- **Special operating modes, e.g. for commercial laboratories**
- **Selection of 25 languages**
- **Integrated firing tong holder**

Technical Data

Power supply	110 – 120 V, 50 – 60 Hz 200 – 240 V, 50 – 60 Hz admissible voltage fluctuations ±10 %
Max. power consumption	12 A at 110 – 120 V 8.5 A at 200 – 240 V
Vacuum pump data	Max. power consumption: 250 W Final vacuum: < 50 mbar Only tested pumps should be used
Dimensions of closed furnace	Depth: 495 mm Width: 320 mm / 395 mm (with cooling tray) Height: 320 mm
Dimensions of firing chamber	Diameter: 90 mm Height: 80 mm
Max. firing temperature	1200 °C
Weight	18.7 kg
Safety information	The furnace is built according to the following standards: – IEC 61010 – UL and CAN/CSA
Radio protection/ Electromagnetic compatibility	EMC tested

Delivery Form

Programat P510

Power cord
Vacuum hose
Programat firing tray kit 2
Automatic Temperature Checking Set ATK2 (test sample)
USB download cable
Programat USB flash drive
Programat WLAN Kit

Recommended Accessories

(not contained in the delivery form)

Programat Accessories Set
Automatic Temperature Checking Set 2 (ATK2)
VP3 easy or VP4 Vacuum Pump
Firing tongs

VP3 easy

VP4

Programat®

A STORY OF SUCCESS

Economical
Effective
Future-oriented

Stand-by key saves power

Efficient use of energy and responsible use of valuable resources: Ivoclar Vivadent is committed to this goal. Therefore, the Programat P510 is equipped with the new Power Saving Technology. In the stand-by mode, the energy consumption of the furnace drops by almost 40 percent. As a result, you save on electricity costs and help to protect our environment. Look out for the Power Saving Technology label on the back of your device.

Saving electricity is easy

Simply press the Power Saving key: If the furnace is not being used, briefly press the Power Saving key to activate the power-saving mode.

Fixed prosthetics

Programat® 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.

Telio®

Alloys

Programat®

IPS Style®

Multilink®

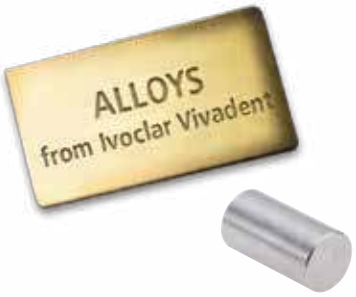
Cervitec®

PREPARE | RESTORE | **PROCESS** | FINISH | PLACE | MAINTAIN

THESE ARE FURTHER PRODUCTS OF THIS CATEGORY:

Alloys

An alloy selection like no other



Performance, quality, trust

- Broad range of alloys adjusted to the requirements of modern dentistry
- Ideally coordinated with ceramic and composite veneering materials
- More than 100 years of experience in dental alloys

IPS Style®

The first patented metal-ceramic containing oxyapatite

Make it your Style

- Make it fast. IPS Style's low shrinkage saves you time
- Make it easy. The material's ease of use ensures reliable results
- Make it natural. The oxyapatite controls the translucency and depth effect

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 for more information.

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664378/en/2017-01-19

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