Programat® P710

The innovative ceramic furnace

A furnace that can do more than just fire.

New with IRT2 function

INFRARED TECHNOLOGY

Digital Shade Assistant

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® P710 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

- **Photo, video and MP3 player**
- **Optimized OSD progress indicator**
- **PDF viewer**
- **Gloss adjustment assistant**
- **Esthetic design package**
- **700 individual programs**
- **Acoustic speech output**
- **WLAN communication with Programat app and mobile phone**

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

Ease of operation

The Programat P710 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, Yellow = not ready, Orange = pre-drying).

The progress indicator on the side of the screen shows the current firing status and the remaining process time as a percentage. The firing status is visible even from a large distance.
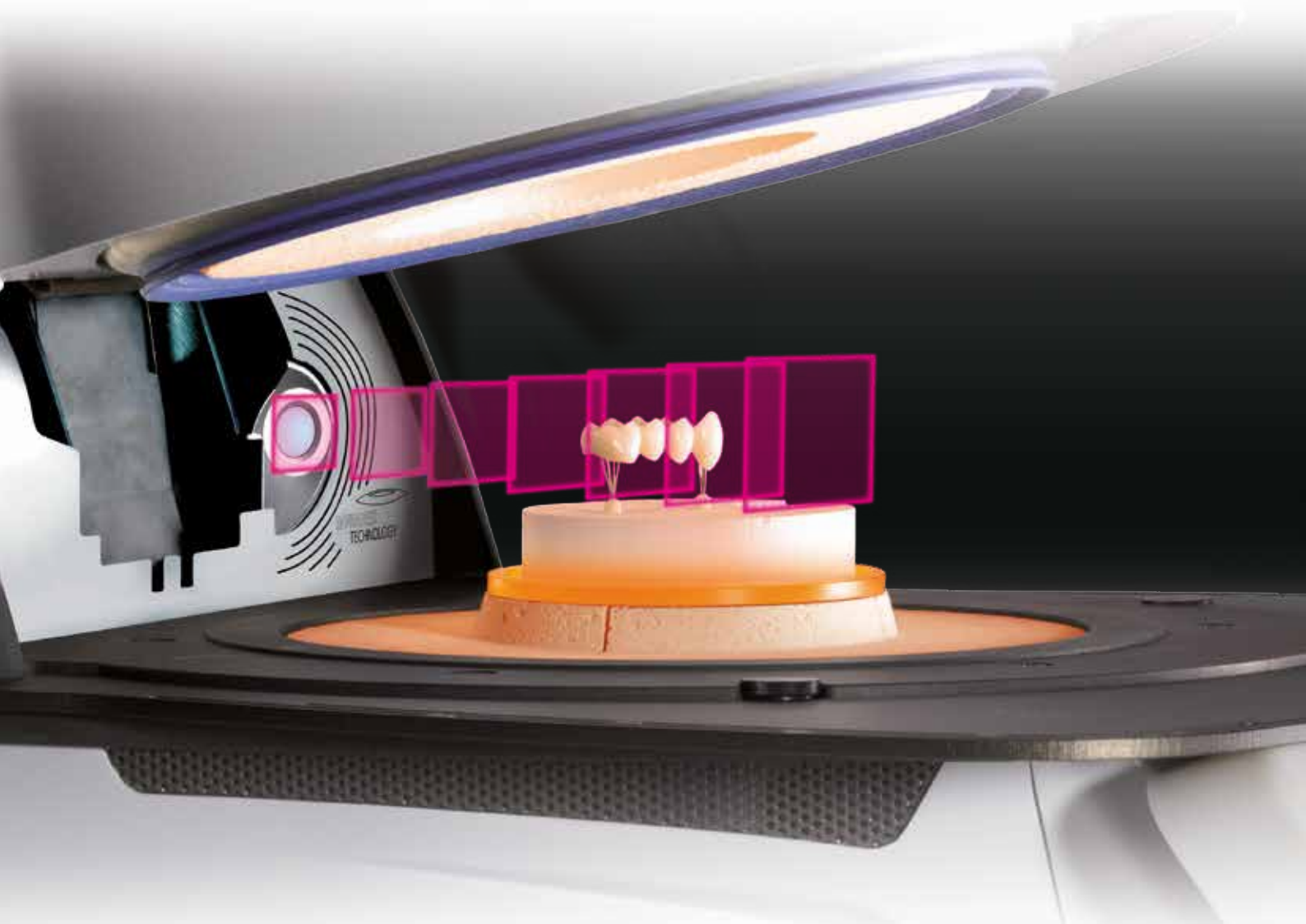
All Ivoclar Vivadent firing programs are pre-set and divided into different materials groups.

The Programat infrared technology.

The innovative Programat infrared technology helps to speed up the firing process by up to 20 per cent and produces enhanced firing results compared with conventional ceramic furnaces. The new thermal imaging camera installed on the furnace automatically controls the pre-drying and closing processes - no matter how big or small or how many restorations are placed in the firing chamber.
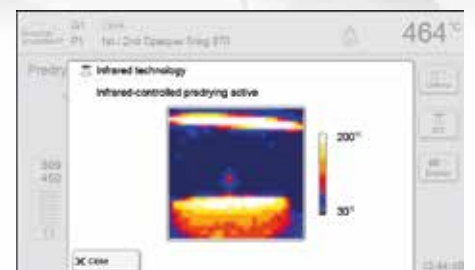
How does infrared technology work?

The integrated thermographic camera is sensitive to infrared radiation and measures the temperature directly at the surface of the fired object. This opens up new possibilities for controlling the drying and closing processes.

IRT FUNCTION BEFORE FIRING

A thermal image of the object in the furnace, which outlines the different temperature levels, is shown on the screen during the drying and closing processes.

Measures the temperature.
Exactly on the fired object.

Cleverly devised software uses the data gathered by the infrared camera to calculate the most suitable pre-drying and closing parameters for each firing cycle. Sensor controlled measurements ensure that the furnace recognizes at which point the objects have been properly pre-dried. Potential fluctuations in quality, resulting from the individual adjustment of the firing programs, are therefore eliminated.

THE BENEFITS

- **Reduces cracks 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 per cent faster firing**

The furnace head and the heater are controlled with the infrared camera to ensure that the pre-defined pre-drying temperature is consistently maintained on the object in the furnace.

INFRARED TECHNOLOGY

NEW

IRT2 FUNCTION AFTER FIRING

After the firing process, the IRT2 function measures the surface temperature of the objects while the furnace head is opening. The thermal image is shown on the screen and a notification on the display indicates when the objects have reached the ideal temperature to be removed from the furnace.

DSA – Digital Shade Assistant

Digital shade analysis

Integrated in the new Programat P710 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

Multimedia functions with PDF viewer
Videos of, for example, directions for use as well as pictures
of patients and teeth can be viewed directly on the screen of the
Programat thanks to its multimedia functionality. MP3 files can
also be played. Additionally, PDF documents can be viewed using
the PDF viewer.

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.

Software update via USB flash drive
Installing new software updates has never been so easy:
Simply plug in a USB flash drive containing the latest software version and
press the "Software Update" button. The update will be automatically
installed.

Gloss adjustment assistant
The gloss adjustment assistant helps to adjust the gloss easily and con-
veniently. The gloss can be increased by extending the holding time (up to
100%) using the + button. After completion of the firing cycle, the value is
set to 0% again.

Remote diagnostics through the Internet via 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
Centres by e-mail. The Service Centre will attend to the matter immediately.

Programat®
A STORY OF SUCCESS

Economical
Efficient
Future-oriented

POWER SAVING
Technology

Standby key to reduce power consumption

Efficient use of power and responsible use of valuable resources: Ivoclar Vivadent is committed to this goal. Therefore, the Programat P710 is equipped with the new Power Saving Technology. In the stand-by mode, for example, the energy consumption of the furnace drops by almost 40 per cent. As a result, you save on electricity costs and help to protect our environment at the same time. Look out for the Power Saving Technology label on the back of your device.

Saving electricity is easy.

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

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	1,200 °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 P710
Power cord
Vacuum hose
Programat firing tray kit 2
Automatic Temperature Checking Set ATK2 (test set)
USB download cable
Programat USB flash drive
Programat WLAN Kit
A–D shade guide
DSA holder kit

Recommended accessories
(not part of the delivery form)

Programat Accessories Set
Automatic Temperature Checking Set 2 (ATK2)
VP3 easy or VP5 vacuum pump
Firing tongs

VP3 easy

VP5

Phone calls
made easy

due to added telephone functionality

Now you can discuss individual patient cases with the clinician at any time - without having to change the workstation.

This has been achieved by adding telephone capabilities to the Programat P710. Your hands stay free and you do not have to interrupt your work. Your mobile phone connects to the furnace via Bluetooth wireless technology and transfers your contact list to the screen of the furnace. A built-in hands-free system and a high-quality microphone ensure a high level of call quality.

Free hands while making a phone call

The contacts from the mobile phone are automatically imported.

Several numbers can be displayed in detail (private, work, etc.)
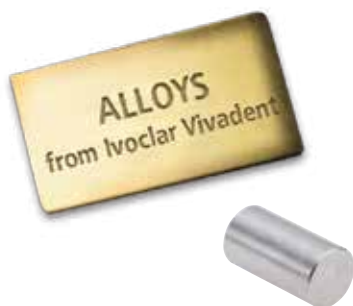
Programat® forms a part of the "Fixed Prosthetics" product category. The products of this category cover the procedure involved in the fabrication of fixed prosthetic restorations – from temporization to restoration care. The products are optimally coordinated with each other and enable successful processing 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

Expertise, quality, confidence

• Comprehensive modern range of alloys
• Specifically adjusted to 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.

ivoclar vivadent®

passion vision innovation