

## BOX TYPE FURNACES

### Remote control - Max. Temperature 1200 °C

Model family: **BOX-BW10-1200**

### Description.

**BOX-BW10-1200** furnace family was designed to provide a flexible and functional laboratory solution. This model family designed to serve for harsh and demanding thermal processes environment up to **1200 °C**. Suitable for many applications including metals melting, organics combustion, ashing and ceramics sintering. Ideal choice for wax removal this model presents an every-day partner for professionals working in dental, jewelry or other similar areas.

The hot zone is constructed from high resistance, low porosity ceramic materials. The low density fibrous back insulation allows for rapid heat up and cool down rates. Having as major priority the economical operation this furnace was carefully designed with a double wall ceramic insulation serving from one hand as a heat exchanger preheating the incoming air and from the other as a heat barrier improving the overall thermal insulation.

With an exhaust chimney at the top, creating a strong natural convection, the entire volume of the chamber can be refreshed several times per minute. The preheated incoming air is entering the chamber through multiple holes creating a smooth and temperature uniform laminar air stream through the sample.



**Ergonomic design with no protruding edges, bolts or other features combines stainless steel parts with painted finish parts for an improved esthetic result.**

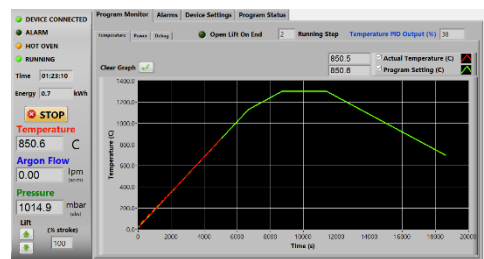
### Key features.

- Control strategy by Thermansys PCC (Power Consistent Control) insures silent operation and compliance with EMC standards.
- Modern double wall construction keeps external surfaces temperature low, emphasizing in operator safety.
- PID control, accurate and uniform temperature profiles.
- KANTHAL® FeCrAl resistors.
- Lift up door keep hot surfaces away from operator.
- ±5 °C temperature uniformity
- Touch screen computer running the user friendly, PYROLOGISM 2.0 software.
- Power and true RMS Current measuring circuits.
- Heater failure, open control thermocouple detection alarms and interlocks.
- Stand alone over-temperature limiter (Watchdog) with manual reset in accordance with EN 60519-2 to protect the heater and load. Alarm event output (dry contact 3A/250V AC/DC).

**Standard equipped with a Digital LCD display temperature controller providing 15 step programming with 1 program storage.**



**Optionally equipped with a sophisticated, remote, touch screen, temperature controller, running the specially designed PYROLOGISM 2.0 software, provides a really unique and friendly, windows oriented architecture interface with multiple, advanced features and peripherals.**

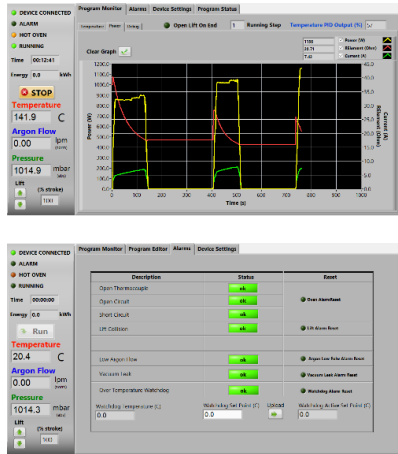


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# PYROLOGISM control and monitoring software.



- Quick setting of a single ramp rate to a set point -run on timer function.
- Set-point programming with up to 15 ramp and constant temperature programming steps – graphical inspection of programming.
- Storage and reload of unlimited number of distinct programs.
- Graphical inspection of programming.
- Real time chart illustrating control temperature and running set point with dynamic zoom.
- Events and alerts messaging.
- Real time true-RMS Current (A), Voltage (V) and Power (W) measurements.
- Real time actual Power (W) and totalized Energy (kWh) chart.
- Saves all data on local memory.
- Tools for manual PID tuning and auto-tuning.
- Virtual keyboard, alarm and event message tab.
- Watchdog over temperature limiter monitor/configuration.

## Specifications and Ordering Information.

### Standard features:

- Maximum continuous temperature 1200 °C.
- Operating Power: 208 /240VAC – 50/60Hz.
- Digital LCD temperature controller with 15 step programming and I program storage.
- S type embedded thermocouple.  
Temperature control accuracy ±0.5 °C.
- Semi-exposed resistors type.
- Safety thermostat
- Two hydraulic threaded ports at the rear side to serve as gas inlets or thermocouple probe ports

### Optional features:

- Remote, touch screen temperature controller, running the specially designed PYROLOGISM 2.0 software on a 8.0in Tablet PC  
**Add suffix \_TSC**
- Programmable stand-alone over-temperature limiter (Watchdog) with manual reset in accordance with EN 60519-2 to protect the heater and load,  
**Add suffix \_WD**
- UPS (Uninterrupted Power Supply) that will keep system alive for short periods of power failure and restore program after power recovery  
**Add suffix \_UPS**

**CE Certified.** Compliant with **Low Voltage Directive 2006/95/EC** (harmonized referenced standard EN 61010-1: 2001 and EN 61010-2-010:2003) and **EMC Directive 2004/108/EC** (harmonized referenced standard EN 61326-1:2006).

Produced in **GREECE** following **ISO 9001:2008 quality management system** and **ISO 14001:2004 environmental management system.**

TABLE1. BOX-BW10-1200 Family Models

Model Part Number	Max. Cont. Temp. °C x Heat up time* min	Furnace internal dim. WxHxD mm	Heated Volume liters	Furnace external dim. WxH**xD mm	Nominal Max. Power (W)
BOX_BW10... _V2.6-1200	1200 x 80	100x120x220	2.6	400x470x410	1600
_V4.0-1200	1200 x 80	180x130x170	4.0	480x480x360	1800
_V6.0-1200	1200 x 80	180x180x190	6.0	480x540x380	2600
_V7.0-1200	1200 x 80	140x140x360	7.0	460x520x580	2800
_V8.0-1200	1200 x 80	180x180x250	8.0	480x540x440	3400
_V14.0-1200	1200 x 80	200x200x340	14.0	500x560x560	4600

\* Furnace working with no load.

\*\* Furnace door closed, plus 50 mm for chimney.

### Ordering Example:

- BOX-BW10\_V2.6-1200: This Part Number includes one BOX-BW10-1200 family furnace having 100x120x220mm internal chamber dimensions including all standard features.

- BOX-BW10\_V2.6-1200-TSC-WD. This Part Number includes one BOX-BW10-1200 family furnace having 100x120x220mm internal chamber dimensions including all standard features plus a Tablet PC running the PYROLOGISM 2.0 software and a programmable over-temperature limiter.

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