

High temperature ovens XHT Line



High temperature oven XHT343

▲ Performances :



Temperature up to 500°C

Temperature fluctuation: less than $\pm 0,2$ °C

Temperature spatial variation: less than $\pm 2,5$ °C at 200°C
(measure done with 9 probes inside the work chamber)

▲ Construction :

5 sizes of ovens from 75 to 686 liters.

The inner casing is made of corrosion and heating resistant stainless steel.

The outer casing is made of sheet steel, finished in a tough stoved epoxy paint (colour light grey RAL 7035).

No contact between inner and outer casing and an optimised insulation minimise heat dissipation.

The walls and the door are insulated with glass fibre. The insulation is 150 mm thick, ensuring efficient operation, low external temperatures and excellent thermal stability. A special gasket provides a good seal between the door and the oven body, aiding insulation.

The insulation and the gasket are asbestos-free. The door is hinged on the right hand side and closed with a robust 2 points fastener.

▲ Heating :

The tubular heating elements are sheathed, made of stainless steel, and ideally placed in the air blow.

No-wear switching (solid state relay) is used for activating and deactivating the heating elements.

▲ Internal fan for air circulation :

All ovens are fan circulated. The air flow speeds up the heating time and also evens the temperature distribution within the oven.

The centrifugal blower is located at the top of the oven, shielded from the workspace by a stainless steel baffle.

Air is drawn into the fan from the top in the centre of the oven and passes over the temperature sensor and the sheathed heater elements.

The heated air is distributed in the bottom of the oven through the whole width and then re-circulated by the fan.

The high temperature ovens are easy to use, having both functional and practical equipments, at very reasonable prices compared with furnaces.

They are suitable for a large number of applications : burning, degassing, pre-heating, hardening, hot air sterilization, tests ... in many branches of industry.

All high temperature ovens are strongly ventilated for the accuracy and homogeneity of temperature in the volume.

Low thermal mass insulation materials and strong power rating have been used to achieve rapid heating.

▲ Exhaust air, fresh air supply :

Through access vent, fresh air is provided and pre-heated before entering the chamber.

A 60 or 80 mm diameter exhaust vent (depending on the model) is provided with an adjustable valve to control the exhaust air flow.

▲ Temperature control and safety :

Temperature sensor is a J thermocouple.

The temperature is controlled by a precise microprocessor-based controller that provides a high accuracy and prevents the set temperature from being exceeded. The controller digitally displays continuously the set and actual values of temperature. An independent second electronic controller, with a second thermocouple, has an adjustable upper limit, giving a class 3.1 protection.

▲ Equipment :

Fixed shelving for convenient loading / unloading.

1 shelf is supplied for XHT075 and 2 for the other models.

A 20 mm diameter access port with fiber cork is fitted as standard in the left-hand wall of the oven.



High temperature oven XHT075

A wide range of factory-fitted options and accessories to meet your exact requirements ...



Technical data:

High temperature ovens	XHT075	XHT125	XHT343	XHT490	XHT686
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Performances

Temperature range		ambient + 20°C to 500°C				
Temperature uniformity 200°C (1)	±°C	< 2,5	< 2,5	< 2,5	< 2,5	< 2,5
Temperature fluctuation	±°C	< 0,2	< 0,2	< 0,2	< 0,2	< 0,2

(1) measured in 9 points following NFC 15-140 without fresh air supply

Dimensions

Work chamber volume	dm ³	75	125	343	490	686
Internal width	mm	500	500	700	700	700
Internal depth	mm	500	500	700	700	700
Internal height	mm	300	500	700	1000	1400
External width*	mm	850	850	1025	1025	1025
External depth*	mm	880	880	1150	1150	1150
External height*	mm	925	1125	1430	1730	2130
Floor height with sub-frame (option)	mm	950	850	750	600	-

* without option

Ventilation, extraction

Internal fan circulated flow	m ³ /h	400	500	1300	1400	2400
Exhaust vent diameter	mm	40	40	80	80	80

Shelves in stainless steel

Supplied / maximum		1 / 2	2 / 3	2 / 4	2 / 6	2 / 8
Shelf dimensions (W x D)	mm	470 x 470	470 x 470	670 x 670	670 x 670	670 x 670
Maximum load per shelf / in the oven	kg	30 / 60	30 / 60	30 / 120	30 / 150	30 / 180

Number of door(s)		1	1	1	1	1
Window dimensions H x W (option)	mm	-	200 x 200	350 x 350	350 x 350	350 x 350
Weight (empty)	kg	95	115	210	270	350

Electrical supply

Power supply 50 Hz	Volts	230 single-phase		400 three-phase five wire		
Power heating	Watts	4 000	5 000	12 000	12 000	15 000

Factory options (To be specified when ordering the main unit)

OG9002	Outside casing in stainless steel	OG9006	Door window
OG9004	Special colour for external casing (indicate the RAL)	OG9005	Air circulation variator
OP0038	Digital timer 0/99 hours, start at the set value	OG9007	Additional safety thermostat class 2.1
OG9008	Weekly automation with digital program timer	OP0118	Additional J thermocouple and connector
OG9021	Temperature profiler (4 programs of 16 segments each)	OP0010	Calibration certificate 1 temperature 1 point
OP0024	Air extractor 230 m ³ /h	OP0116	Additional access port diameter 40 mm & fiber cork
OP0025	Air extractor 485 m ³ /h	OP0117	Additional access port diameter 60 mm & fiber cork
OG9014	Portable paper recorder 1 temperature	OP0080	Air extractor 230 m ³ /h with speed variator
OG9015	Portable paper recorder 2 temperatures	OP0091	Air extractor 485 m ³ /h with speed variator

Accessories (can be ordered separately)

GA9001	Extra shelf 30 kg and its supports	GA9005	Sub-frame
		GA9006	Sub-frame with castors
GA9002	Reinforced shelf 60 kg and its supports	AC0032	Fiber cork for access port diameter 40 mm
		AC0033	Fiber cork for access port diameter 60 mm

