

XSB - 1400°C-1600°C Box Furnaces 1-Zone

The XSB box furnaces have a hinged vertical lift door that keeps the hot door insulation always facing away from the operator. A door safety switch interrupts power to the heating elements when the door is opened.

These furnaces use Silicon Carbide (SiC) heating elements with free radiating dual helix design. The high temperature ceramic fiber furnace chamber, heating elements, hearth plate and chamber threshold are designed to be easily replaced if they become worn out.

An air gap between the heated chamber exterior and furnace exterior surface is designed to minimize the external surface temperature of the furnace.



XSB-6-6-9-1SS-F01-H

Standard Features

- Up to 1600°C maximum operating temperature
- Double helix, free radiating Silicon Carbide (SiC) heating elements ensure rapid heat up, excellent temperature uniformity and quick cool down
- Thermcraft SmartControl touch screen PID control system (see control system descriptions)
- Independent over temperature control
- Long life Type R thermocouple
- Silicon Carbide hearth plate
- Heated chamber volume up to 42L
- 10' (3m) power cables
- Furnace and controller ship fully assembled and ready for connection to incoming power supply

Options and Upgrades

- The SmartControl can be upgraded to include profile programming, data acquisition and communications. These options can be purchased individually or separately and can also be purchased as an upgrade after the unit has been shipped and installed
- Inlet and outlet fittings for gas purging
- Forced exhaust fan and duct
- Exhaust pipe for fume extraction
- Eurotherm 2404 series controls and communications upgrades
- Custom options and upgrades available upon request, such as output control of external devices, actuators, flow controllers, etc. (extends delivery time)

Specifications

Model	Max Temp (°C)	Heat Zones	Heat Up Time (mins)	Chamber Volume (L)	Chamber Internal Dimensions HxWxD in. (mm)	Furnace External Dimensions HxWxD in. (mm)	Height with Door Open in. (mm)	Max Power (Watts)	Volts	Amps	Thermo couple Type	Weight lbs (kg)
XSB-6-6-9-1S	1400	1	22	5	6x6x9 (152x152x228)	22x20x26 (558x508x660)	32 (812)	5877	230	26	R	88 (40)
XSB-8-8-12-1S	1400	1	24	12	8x8x12 (203x203x304)	25x24x31 (635x610x787)	41(1041)	7943	230	35	R	132 (60)
XSB-12-12-18-1S	1400	1	42	42	12x12x18 (304x304x457)	31x26x36 (787x660x914)	48 (1220)	16000	230	70	R	176 (80)
XSB-6-6-9-1SS	1600	1	30	5	6x6x9 (152x152x228)	22x20x26 (558x508x660)	32 (812)	5877	230	26	R	88 (40)
XSB-8-8-12-1SS	1600	1	35	12	8x8x12 (203x203x304)	25x24x31 (635x610x787)	41(1041)	7943	230	35	R	132 (60)
XSB-12-12-18-1SS	1600	1	45	42	12x12x18 (304x304x457)	31x26x36 (787x660x914)	48 (1220)	16000	230	70	R	176 (80)

Notes
 -Continuous operating temperature is 100°C below maximum temperature
 -Heat up times are measured under no load



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Temperature Profile

- Heat-up time measured from ambient to maximum temperature at 100% power output with empty chamber
- Cool-down to 200°C is 6 hours, measured with power shut off, door closed
- Faster cool-down rates can be achieved with forced cooling and door open (reduces heater life)
- Uniformity ±5°C over 9 data points, profile taken at a maximum temperature
- Temperature stability of ±1°C across entire temperature range