

HS3 HIGH TEMPERATURE FURNACES



HIGH SPEED STEEL BOX FURNACES

HS3 Series Box furnaces for hardening and pre-heating high speed steels and firing ceramics to 2450°F. The control package includes an SCR power supply, digital temperature controller, and platinum thermocouple. The SCR proportions the lowest power input required for each application, limiting amperage. Combined with silicon carbide heating elements designed with a 200% aging factor, this unique operating system saves money by providing excellent element life. In addition, initial purchase costs are lowered by eliminating the large expensive power transformer and oversized contactors. Operation is simplified without the manual adjustment required with tap switches.

Designed with silicon carbide heating elements mounted above and below the hearth and low-mass ceramic fiber insulation for fast uniform heat. This energy-efficient furnace promotes reduced power demand, quicker recovery rates, and lower utility costs.

All models are completely wired, assembled, test-fired, and shipped ready for connection to 230 single or 3-phase voltage supply. Compact design, fast installation, and simple, safe, dependable operation. Available in five standard sizes.

STANDARD FEATURES

- Welded sheet metal shell construction with structural reinforcement.
- Silicon carbide elements are mounted above and below the hearth to provide uniform temperature.



Model HS3-M24

- Welded sheet metal shell construction with structural reinforcement.
- Silicon carbide elements are mounted above and below the hearth to provide uniform temperature.
- SCR power supply.
- Multi-layered 6" of energy-efficient ceramic fiber and mineral wool block insulation for maximum heat storage, minimum heat loss, and lower utility costs.
- Silicon carbide hearth plates support the workload and readily transfer heat from the floor elements.
- Double-pivot horizontal swing door keeps the hot face surface away from the operator.
- Safety micro-switch shuts off power to elements when the door opens.
- Eurotherm digital temperature controller with type R thermocouple.
- Controls mounted below the furnace in the enclosed cabinet operate on 230 volts.

MODEL SPECIFICATIONS

Model	Chamber Dimensions	Overall Dimensions	KW	Voltage	Weight (lbs)
HS3-A12	6"H X 6"W X 12"D	26"H X 31"W X 27"D	3	230/1	195
HS3-B9	9"H X 9"W X 9"D	29"H X 34"W X 24"D	3.5	230/1	215
HS3-B18	9"H X 9"W X 18"D	29"H X 34"W X 33"D	6.3	230/1	270
HS3-K12	12"H X 12"W X 12"D	66"H X 41"W X 27"D	8.6	230/1	585
HS3-K18	12"H X 12"W X 18"D	66"H X 41"W X 33"D	11.8	230/1	670
HS3-K24	12"H X 12"W X 24"D	66"H X 41"W X 39"D	15.5	230/3	755
HS3-M18	12"H X 18"W X 18"D	66"H X 47"W X 33"D	16.6	230/3	770
HS3-M24	12"H X 18"W X 24"D	66"H X 47"W X 39"D	18.5	230/3	865