HS8000GT HIGH TEMPERATURE DUAL CHAMBER ATMOSPHERE FURNACES

LUCIFER FURNACES

HIGH SPEED DUAL CHAMBER FURNACES

Dual chamber space-saving furnaces for hardening and drawing high-speed steels and ceramics. The GT models are designed with a continuously welded furnace shell, gasketed door assembly, and atmosphere inlet and outlet ports for operation with a positive flow of atmosphere in the upper chamber. These models are best suited for constant operation to maintain a dry refractory environment in the work area to minimize oxidation on workloads. The upper chamber, rated for 2450°F, is equipped with silicon carbide heating elements controlled by an SCR power supply. The SCR proportions the lowest power input required for each application, limiting amperage for steady state control. Automatic compensation for changes in element resistance and workload, combined with silicon carbide elements designed with a 200% aging factor, result in excellent element life. This unique operating system saves money on initial purchase by eliminating the large expensive power transformer and oversized contactors. Operation is simplified without the manual adjustment of tap switches.
The lower chamber is complete with wire wound heating elements, stainless steel liner and fan assembly to recirculate heat for uniform temperature.
Available at operating temperatures of:

- 88 Models: 800°F,
- 82 Models: 1200°F
- 84 Models: 1400°F
- 86 Models: 1600°F

All models are completely wired, test fired, and shipped ready for connection to main power and atmosphere supply.

Model HS82GT-K18

STANDARD FEATURES

- Continuously welded sheet metal single shell construction.
- Both chambers are designed with the same working dimensions.
- Silicon carbide heating elements are mounted above and below the hearth for uniform heat in the upper chamber.
- SCR power supply.
- Multi-layered energy-efficient lightweight ceramic fiber and mineral block insulation for maximum heat storage and minimum heat loss in the upper chamber.
- Coil wound heating elements are mounted in easy-to-replace holders located on the side walls of the lower chamber.
- Silicon carbide hearth plate for load support and thermal transfer from floor elements in the upper chamber.
- Double pivot horizontal swing upper chamber door with gasket and horizontal swing lower chamber door.
- Safety micro-switch shuts off power to elements and fan when the door opens.
- Honeywell digital temperature controller with type R thermocouple on the upper chamber.
- Controls are mounted in a side mounted NEMA 1 panel and operate on 230 volts.

MODEL SPECIFICATIONS

Model	Chamber Dimensions	Overall Dimensions	KW	Voltage	Weight (lbs)
HS82GT-K12	12"H X 12"W X 12"D	72"H X 42"W X 40"D	13.1	230/3/60	900
HS82GT-K18	12"H X 12"W X 18"D	72"H X 42"W X 46"D	17.8	230/3/60	1000
HS82GT-K24	12"H X 12"W X 24"D	72"H X 42"W X 52"D	24	230/3/60	1100
HS82GT-M18	12"H X 18"W X 18"D	72"H X 48"W X 46"D	25.6	230/3/60	1225
HS82GT-M24	12"H X 18"W X 24"D	72"H X 48"W X 52"D	29.5	230/3/60	1400
HS82GT-M36	12"H X 18"W X 36"D	72"H X 48"W X 65"D	41	230/3/60	1650
HS82GT-024	18"H X 18"W X 24"D	78"H X 48"W X 52"D	41	230/3/60	1700
HS82GT-036	18"H X 18"W X 36"D	78"H X 54"W X 64"D	50	230/3/60	2100
HS82GT-P36	18"H X 24"W X 36"D	78"H X 54"W X 64"D	60	230/3/60	2500
HS82GT-R36	24"H X 24"W X 36"D	84"H X 54"W X 64"D	72	230/3/60	2960