## HS8000 HIGH TEMPERATURE DUAL CHAMBER FURNACES



## HIGH SPEED DUAL CHAMBER FURNACES

Dual chamber space-saving furnaces for hardening and drawing high-speed steels and ceramics. 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 heating elements designed with a 200% aging factor result in excellent element life. This unique operating system saves money on initial purchases by eliminating the large expensive power transformer and oversized contactors. Operation is simplified without the manual adjustment required with 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 800°F(88), 1200°F(82), 1400°F(84), and 1600°F(86).

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

## **STANDARD FEATURES**

- Heavy gauge welded sheet metal single shell construction.
- Both chambers are designed with the same working dimensions.



Model HS84-M24

- 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 and horizontal swing lower chamber door.
- Safety micro-switch shuts off power to elements and fan when the door opens.
- Eurotherm 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) |
|----------|--------------------|--------------------|------|----------|--------------|
| HS82-K12 | 12"H X 12"W X 12"D | 72"H X 42"W X 40"D | 13.1 | 230/3/60 | 900          |
| HS82-K18 | 12"H X 12"W X 18"D | 72"H X 42"W X 46"D | 17.8 | 230/3/60 | 1000         |
| HS82-K24 | 12"H X 12"W X 24"D | 72"H X 42"W X 52"D | 24   | 230/3/60 | 1100         |
| HS82-M18 | 12"H X 18"W X 18"D | 72"H X 48"W X 46"D | 25.6 | 230/3/60 | 1225         |
| HS82-M24 | 12"H X 18"W X 24"D | 72"H X 48"W X 52"D | 29.5 | 230/3/60 | 1400         |
| HS82-024 | 18"H X 18"W X 24"D | 78"H X 48"W X 52"D | 41   | 230/3/60 | 1700         |
| HS82-036 | 18"H X 18"W X 36"D | 78"H X 54"W X 64"D | 50   | 230/3/60 | 2100         |
| HS82-P24 | 18"H X 24"W X 24"D | 78"H X 54"W X 52"D | 42   | 230/3/60 |              |
| HS82-P36 | 18"H X 24"W X 36"D | 78"H X 54"W X 64"D | 60   | 230/3/60 | 2500         |
| HS82-R24 | 24"H X 24"W X 24"D | 84"H X 54"W X 52"D | 52   | 230/3/60 |              |
| HS82-R36 | 24"H X 24"W X 36"D | 84"H X 54"W X 64"D | 72   | 230/3/60 | 2960         |