

## 1500°C Heavy Duty Tube Furnace

Our 1500°C Small Tube Furnace is easily operational, has an energy efficient design, fast cooling and rapid heat-up and response time. This unit offers superior radial and linear temperature uniformity and requires little or no maintenance. There are a variety of furnace sizes.



### Single Zone Model Features

- Solid design incorporates double-end silicon carbide heating elements
- Chamber constructed of high-temperature graded insulation
- Insulating vestibules at the ends of the heated chamber
- Long-life, fast response type "R" thermocouples attached to six feet of compensated thermocouple lead wire with a polarized plug
- Cross chamber element positioning compensates for heat loss from the ends of the process tube and improves system performance
- Temperature - 1500°C (2732°F) Maximum
- Chamber Sizes
  - 12" heated length bored for 2" OD process tube
  - 36" heated length bored for 7" OD process tube.

### Three Zone Model Features

- Three independent power circuits (zones) with independent thermocouples for control reference
- Temperature profiling: End zone setpoint temperature can be raised to compensate for heat losses and increase the length of the uniform temperature zone in the center of the furnace. To produce a pronounced controlled temperature gradient, one end zone can be operated at a lower temperature than the center zone, while the other end zone is run at a higher temperature. The setpoint temperature of each furnace zone is adjustable over a 0-1200°C range.
- Uniform center zone temperature profile
- Produces a pronounced controlled gradient
- Temperature - 1500°C (2732°F) Maximum
- Chamber Sizes
  - 12" heated length bored for 2" OD process tube
  - 36" heated length bored for 7" OD process tube.

### Options

- Computer communications port
- Software
- Inert and combustible atmosphere admission systems
- Single-end and double-end retorts
- All standard 1500°C single and three zone tube furnace models are designed for horizontal operation. Furnaces specifically designed for vertical mounting are available on special order.



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| 1500°C Heavy Duty Tube Furnace - SINGLE ZONE |                                      |                                       |         |                 |                           |
|--|--------------------------------------|---------------------------------------|---------|-----------------|---------------------------|
| Model  | Chamber Size Bore ID x L inches (cm) | Overall Dimensions WxHxD inches (cm)  | Wattage | Control Console | Shipping Weight lbs. (kg) |
| 54233  | 2 x 12 (5.1 x 30.5)                  | 20 x 19 x 25<br>(50.8 x 48.3 x 63.5)  | 7,200   | 58125           | 250 (113)                 |
| 54253  | 2 x 24 (5.1 x 61)                    | 20 x 19 x 37<br>(50.8 x 48.3 x 94)    | 6,857   | 58125           | 370 (168)                 |
| 54433  | 3 x 12 (7.6 x 30.5)                  | 20 x 19 x 25<br>(50.8 x 48.3 x 63.5)  | 7,200   | 58125           | 270 (122)                 |
| 54453  | 3 x 24 (7.6 x 61)                    | 20 x 19 x 37<br>(50.8 x 48.3 x 94)    | 6,857   | 58125           | 390 (177)                 |
| 54553  | 4 x 24 (10.2 x 61)                   | 20.5 x 20 x 37<br>(52.1 x 50.8 x 94)  | 11,900  | 58175           | 430 (195)                 |
| 54653  | 5 x 24 (12.7 x 61)                   | 25.5 x 24 x 37<br>(64.8 x 61 x 94)    | 13,200  | 58175           | 520 (236)                 |
| 54753  | 6 x 24 (15.2 x 61)                   | 33.5 x 31 x 37<br>(85.1 x 78.7 x 94)  | 15,000  | 58175           | 720 (327)                 |
| 54853  | 7 x 24 (17.8 x 61)                   | 33.5 x 31 x 37<br>(85.1 x 78.7 x 94)  | 28,200  | 58185           | 755 (342)                 |
| 1500°C Heavy Duty Tube Furnace - THREE ZONE  |                                      |                                       |         |                 |                           |
| 54259  | 2 x 24 (5.1 x 61)                    | 22.5 x 20 x 37<br>(57 x 50.8 x 94)    | 12,600  | 58475           | 370 (168)                 |
| 54279  | 2 x 36 (5.1 x 91.4)                  | 22.5 x 20 x 49<br>(57 x 50.8 x 124)   | 13,700  | 58475           | 460 (209)                 |
| 54459  | 3 x 24 (7.6 x 61)                    | 22.5 x 20 x 37<br>(57 x 50.8 x 94)    | 12,600  | 58475           | 390 (177)                 |
| 54479  | 3 x 36 (7.6 x 91.4)                  | 22.5 x 20 x 49<br>(57 x 50.8 x 124)   | 13,700  | 58475           | 480 (218)                 |
| 54559  | 4 x 24 (10.2 x 61)                   | 22.5 x 20 x 37<br>(57 x 50.8 x 94)    | 13,900  | 58475           | 430 (195)                 |
| 54579  | 4 x 36 (10.2 x 91.4)                 | 22.5 x 20 x 49<br>(57 x 50.8 x 124)   | 16,000  | 58475           | 550 (249)                 |
| 54659  | 5 x 24 (12.7 x 61)                   | 25.5 x 24 x 37<br>(64.8 x 61 x 94)    | 15,900  | 58475           | 520 (236)                 |
| 54679  | 5 x 36 (12.7 x 91.4)                 | 25.5 x 24 x 49<br>(64.8 x 61 x 124)   | 19,800  | 58485           | 750 (340)                 |
| 54759  | 6 x 24 (15.2 x 61)                   | 33.5 x 31 x 37<br>(85.1 x 78.7 x 94)  | 20,000  | 58485           | 720 (327)                 |
| 54779  | 6 x 36 (15.2 x 91.4)                 | 33.5 x 31 x 49<br>(85.1 x 78.7 x 124) | 25,000  | 58485           | 1000 (454)                |
| 54859  | 7 x 24 (17.8 x 61)                   | 31 x 28 x 37<br>(78.7 x 71.1 x 94)    | 30,000  | 58495           | 755 (342)                 |
| 54879  | 7 x 36 (17.8 x 91.4)                 | 31 x 28 x 49<br>(78.7 x 71.1 x 124)   | 37,500  | 58495           | 1160 (526)                |

All specifications are subject to change without notice.

