



# 1700°C High Temperature Box Furnaces



HTF 17/10/3216P1

## HIGH TEMPERATURE APPLICATIONS

- Sintering of High Temperature Materials
- Glass Melting
- High Temperature Testing of Ceramics
- Fusion and Firing Processes
- Powder Metallurgy Processes

## General Features

- Three chamber sizes available.
- Heating elements located on both sides of chamber ensure good thermal uniformity.
- All Carbolite standard 1700°C furnaces are fitted with 3216P1 programmer and a separate independent over-temperature protection controller.
- Long-life molybdenum disilicide heating elements are suitable for intermittent or continuous operation.
- Vertical lift door design keeps hot door insulation away from operator.
- Advanced high temperature, high strength hot face insulation is combined with graded low thermal mass insulation to improve energy efficiency and heat-up rates.
- Large diameter heating elements greatly reduce potential for mechanical breakage.
- RS232 digital communications provided as standard on Models HTF 17/5 and HTF 17/10.
- Positive break door safety switch isolates power to the heating elements when door is opened.
- Low temperatures of outer case and critical components are provided through fan cooling.
- Molybdenum disilicide element resistance does not change with usage, providing no restriction on placement of a new element in circuit with older elements.
- Chamber vent provides for process exhaust.
- Serviceability is aided by the furnace's mechanical and electrical design.
- Choice of optional programmable controls.
- Choice of multiple accessories and options. (See pages 43-46)

## 1700°C High Temperature Box Furnaces

Furnace Model	Max. Temp. (°C)	Internal Chamber Dimensions Inches (mm)			External Dimensions Inches (mm)			TC Type	Max. Power (kW)	Furnace Voltage	Shipping Weight (lb.)
		Height	Width	Depth	Height	Width	Depth				
◆ HTF 17/5	1700	6.25 (158)	6.00 (150)	8.75 (225)	22.25 (565)	32.50 (830)	25.50 (650)	B	4.19	208/240	247
HTF 17/10	1700	9.25 (232)	8.00 (200)	8.75 (225)	22.25 (565)	32.50 (830)	25.50 (650)	B	5.92	208/240	318
✓ RHF 17/25	1700	12.00 (300)	12.00 (300)	12.00 (300)	71.00 (1800)	43.25 (1100)	26.75 (680)	B	9.60	208/240*	1136

◆ Stock Product

✓ Electric Door

Continuous operation at or near maximum temperature may impact element, thermocouple and insulation life.

Note: HTF 17/5 is stocked with 3216P1 programmer.

HTF 17/5 and HTF 17/10 are provided with RS232 digital communications.

Specify voltage at time of order.

\* 3 phase electrical design.



## General Features

- Four chamber sizes available.
- Heating elements located on both side and rear walls of chamber ensure excellent thermal uniformity.
- All Carbolite standard 1800°C furnaces are fitted with 3216P1 programmer and a separate independent over-temperature protection controller.
- Long-life molybdenum disilicide heating elements are suitable for intermittent or continuous operation.
- Vertical lift door design keeps hot door insulation away from operator.
- Advanced high temperature, high strength hot face insulation is combined with graded low thermal mass insulation to improve energy efficiency and heat-up rates.
- Large diameter heating elements greatly reduce potential for mechanical breakage.
- RS232 digital communications provided as standard on Models HTF 18/4 and HTF 18/8.
- Positive break door safety switch isolates power to the heating elements when door is opened.
- Low temperatures of outer case and critical components are provided through fan cooling.
- Molybdenum disilicide element resistance does not change with usage, providing no restriction on placement of a new element in circuit with older elements.
- Chamber vent provides for process exhaust.
- Choice of optional programmable controls.
- Serviceability is aided by the furnace's mechanical and electrical design.
- Choice of multiple accessories and options. (See pages 43-46)



HTF 18/27/3216P1

## 1800°C High Temperature Box Furnaces

Furnace Model	Max. Temp. (°C)	Internal Chamber Dimensions Inches (mm)			External Dimensions Inches (mm)			TC Type	Max. Power (kW)	Furnace Voltage	Shipping Weight (lb.)
		Height	Width	Depth	Height	Width	Depth				
HTF 18/4	1800	5.50(140)	5.50 (140)	7.50 (190)	22.25 (565)	32.50 (830)	25.50 (650)	Pt 20% Rh/Pt 40% Rh	4.5	208/240	265
HTF 18/8	1800	8.25 (208)	7.50 (190)	7.50 (190)	22.25 (565)	32.50 (830)	25.50 (650)	Pt 20% Rh/Pt 40% Rh	6.4	208/240	375
✓ HTF 18/15	1800	8.75 (220)	8.75 (220)	12.00 (300)	62.25 (1580)	27.25 (690)	31.50 (800)	Pt 20% Rh/Pt 40% Rh	9.0	208/240	805
HTF 18/27	1800	12.00 (300)	12.00 (300)	12.00 (300)	63.50 (1610)	30.75 (780)	37.25 (945)	Pt 20% Rh/Pt 40% Rh	18.0	208/240*	1125

Specify voltage at time of order.

Note: HTF 18/4 and HTF 18/8 are provided with RS232 digital communications.

\*3 phase electrical design.

✓ Electric Door

Continuous operation at or near maximum temperature may impact element, thermocouple and insulation life.