

High Temperature Laboratory Furnace - HTF

General Information

The laboratory HTF high temperature furnace range comprises 1700 °C and 1800 °C models.

The two smaller models in each temperature are bench mounted and the larger units are floor-standing. These furnaces may be customised in order to satisfy specific customer requirements, e. g. the addition of catalytic afterburners for ceramic binder burn-off applications.



Standard features

- 1700 °C & 1800 °C maximum operating temperature
- From 4 to 27 litre capacities
- High quality molybdenum disilicide heating elements
- Vertical lift door keeps heated surface away from the user
- Advanced refractory interior, used in combination with energy efficient low thermal mass insulation
- Programmable 3216P1 controller
- Over-temperature protection
- Digital RS232 communications on the following models: HTF 17/5, HTF 17/10, HTF 18/4 & HTF 18/8
- Fan cooling for low external case temperature
- The HTF 17/25 & HTF 18/15 both have electric door actuation

Options (specify these at time of order)

- A range of sophisticated digital controllers, multi-segment programmers and data loggers is available. These can be fitted with RS232, RS485 or Ethernet communications
- RS232 & RS485 communications (HTF17/25, HTF18/15 & HTF18/27)

Technical Specifications

HTF 17/5

Max temp (°C)	1700
Volume (litres)	5
Heat-up time (mins)	50
Dimensions: Internal H x W x D (mm)	158 x 150 x 225
Dimensions: External H x W x D (mm) H (door open)	565 x 830 x 650 (850)
Configuration	Bench-top
Max power (W)	4050
Digital RS232 Comms	Standard
Thermocouple type	B
Weight (kg)	109

High Temperature Laboratory Furnace - HTF

HTF 17/10

Max temp (°C)	1700
Volume (litres)	10
Heat-up time (mins)	44
Dimensions: Internal H x W x D (mm)	232 x 200 x 225
Dimensions: External H x W x D (mm) H (door open)	565 x 830 x 650 (850)
Configuration	Bench-top
Max power (W)	5920
Digital RS232 Comms	Standard
Thermocouple type	B
Weight (kg)	133

HTF 17/25

Max temp (°C)	1700
Volume (litres)	25
Heat-up time (mins)	45
Dimensions: Internal H x W x D (mm)	300 x 275 x 300
Dimensions: External H x W x D (mm) H (door open)	1800 x 1100 x 680 (2600)
Configuration	Floor-standing
Max power (W)	8200
Digital RS232 Comms	Option
Thermocouple type	B
Weight (kg)	400

HTF 18/4

Max temp (°C)	1800
Volume (litres)	4
Heat-up time (mins)	65
Dimensions: Internal H x W x D (mm)	140 x 140 x 190
Dimensions: External H x W x D (mm) H (door open)	565 x 830 x 650 (850)
Configuration	Bench-top
Max power (W)	4650
Digital RS232 Comms	Standard
Thermocouple type	Pt20%Rh/Pt40%Rh
Weight (kg)	115

High Temperature Laboratory Furnace - HTF

HTF 18/8

Max temp (°C)	1800
Volume (litres)	8
Heat-up time (mins)	56
Dimensions: Internal H x W x D (mm)	210 x 190 x 190
Dimensions: External H x W x D (mm) H (door open)	565 x 830 x 650 (850)
Configuration	Bench-top
Max power (W)	6200
Digital RS232 Comms	Standard
Thermocouple type	Pt20%Rh/Pt40%Rh
Weight (kg)	128

HTF 18/15

Max temp (°C)	1800
Volume (litres)	15
Heat-up time (mins)	70
Dimensions: Internal H x W x D (mm)	220 x 220 x 300
Dimensions: External H x W x D (mm) H (door open)	1580 x 690 x 800 (1735)
Configuration	Floor-standing
Max power (W)	7900
Digital RS232 Comms	Option
Thermocouple type	Pt20%Rh/Pt40%Rh
Weight (kg)	310

HTF 18/27

Max temp (°C)	1800
Volume (litres)	27
Heat-up time (mins)	55
Dimensions: Internal H x W x D (mm)	300 x 300 x 300
Dimensions: External H x W x D (mm) H (door open)	1610 x 780 x 945 (1245)
Configuration	Floor-standing
Max power (W)	8180
Digital RS232 Comms	Option
Thermocouple type	Pt20%Rh/Pt40%Rh
Weight (kg)	509

Please note:

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- Maximum continuous operating temperature is 100 °C below maximum temperature
- Heat up rate is measured to 100 °C below maximum, using an empty chamber
- Chemical reaction between the heating elements and zirconia may discolour the zirconia. Processing advice or alternative elements are available; please enquire.