

High Temperature Clean Room Oven - HTCR

General Information

The HTCR Series of clean room ovens comprises sixteen standard models with five sizes between 28 and 1000 litres available with maximum temperatures of 400°C, 500°C and 600°C.

Once processed through a customer's standard material entry regime HTCR Ovens are suitable for operation within an ISO 14644-1 Class 6 environment*.

Optionally HTCR ovens can be supplied for operation within an ISO 14644-1 Class 5 environment*.

*Federal Standard 209E Class 1000 was superseded in 2001 by ISO 14644-1 Class 6

*Federal Standard 209E Class 100 was superseded in 2001 by ISO 14644-1 Class 5



Standard features

- 400°C, 500°C or 600°C maximum operating temperatures
- 28 to 1000 litre chamber volumes
- Full sealed low thermal mass insulation to avoid shedding fibres
- Fully enclosed brushless fan motor
- Carbolite Gero 301 controller, with single ramp to set-point & process timer
- Smooth easily cleaned gloss epoxy exterior
- Polished stainless steel sealed interior
- Perforated stainless steel shelves
- Particle free silicone rubber door seal
- Membrane control panel with clear bright LED display
- Double skin construction ensures safe outer case temperature
- Over-temperature protection (recommended to protect valuable contents & for unattended operation)

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
- ISO-14644-1 Class 5 models are optionally available
- Access port for independent thermocouple
- Cable entry ports
- Lockable door
- Door switch
- Fixed or castor mounted floor stands
- Through wall (flange fitted) as well as fully bespoke designs are available
- Optional floor stand

Technical Specifications

High Temperature Clean Room Oven - HTCR

HTCR4/28

Max temp (°C)	400
Min temp (°C)	Ambient +60
Volume (litres)	28
Temp stability (°C)	±0.5
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	50
Recovery time (mins)	10
Dimensions: Internal H x W x D (mm)	305 x 305 x 305
Dimensions: External H x W x D (mm)	880 x 675 x 885
Shelves fitted / accepted	2 / 2
Shelf loading each / total (kg)	10 / 20
Configuration	Bench-top
Max power (W)	1000

HTCR4/95

Max temp (°C)	400
Min temp (°C)	Ambient +60
Volume (litres)	94
Temp stability (°C)	±0.5
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	90
Recovery time (mins)	10
Dimensions: Internal H x W x D (mm)	455 x 455 x 455
Dimensions: External H x W x D (mm)	1010 x 810 x 1120
Shelves fitted / accepted	3 / 4
Shelf loading each / total (kg)	15 / 30
Configuration	Bench-top
Max power (W)	3000

High Temperature Clean Room Oven - HTCR

HTCR4/220

Max temp (°C)	400
Min temp (°C)	Ambient +60
Volume (litres)	227
Temp stability (°C)	±0.5
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	75
Recovery time (mins)	16
Dimensions: Internal H x W x D (mm)	610 x 610 x 610
Dimensions: External H x W x D (mm)	1160 x 1030 x 1280
Shelves fitted / accepted	3 / 4
Shelf loading each / total (kg)	10 / 50
Configuration	Bench-top
Max power (W)	3000

HTCR4/500

Max temp (°C)	400
Min temp (°C)	Ambient +60
Volume (litres)	510
Temp stability (°C)	±0.5
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	--
Recovery time (mins)	--
Dimensions: Internal H x W x D (mm)	800 x 800 x 800
Dimensions: External H x W x D (mm)	1305 x 1115 x 1450
Shelves fitted / accepted	3 / 5
Shelf loading each / total (kg)	--
Configuration	Floor-standing
Max power (W)	7500

High Temperature Clean Room Oven - HTCR

HTCR4/1000

Max temp (°C)	400
Min temp (°C)	Ambient +60
Volume (litres)	1000
Temp stability (°C)	±0.5
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	--
Recovery time (mins)	--
Dimensions: Internal H x W x D (mm)	1000 x 1000 x 1000
Dimensions: External H x W x D (mm)	1310 x 1530 x 1635
Shelves fitted / accepted	3 / 5
Shelf loading each / total (kg)	--
Configuration	Floor-standing
Max power (W)	12000

HTCR5/28

Max temp (°C)	500
Min temp (°C)	Ambient +60
Volume (litres)	28
Temp stability (°C)	±0.5
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	75
Recovery time (mins)	16
Dimensions: Internal H x W x D (mm)	305 x 305 x 305
Dimensions: External H x W x D (mm)	880 x 675 x 885
Shelves fitted / accepted	2 / 2
Shelf loading each / total (kg)	10 / 20
Configuration	Bench-top
Max power (W)	2000

High Temperature Clean Room Oven - HTCR

HTCR5/95

Max temp (°C)	500
Min temp (°C)	Ambient +60
Volume (litres)	94
Temp stability (°C)	±0.5
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	110
Recovery time (mins)	16
Dimensions: Internal H x W x D (mm)	455 x 455 x 455
Dimensions: External H x W x D (mm)	1010 x 810 x 1120
Shelves fitted / accepted	3 / 4
Shelf loading each / total (kg)	15 / 30
Configuration	Bench-top
Max power (W)	4500

HTCR5/220

Max temp (°C)	500
Min temp (°C)	Ambient +60
Volume (litres)	227
Temp stability (°C)	±0.5
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	105
Recovery time (mins)	16
Dimensions: Internal H x W x D (mm)	610 x 610 x 610
Dimensions: External H x W x D (mm)	1160 x 1030 x 1280
Shelves fitted / accepted	3 / 4
Shelf loading each / total (kg)	10 / 50
Configuration	Bench-top
Max power (W)	4500

High Temperature Clean Room Oven - HTCR

HTCR5/500

Max temp (°C)	500
Min temp (°C)	Ambient +60
Volume (litres)	510
Temp stability (°C)	±0.5
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	--
Recovery time (mins)	--
Dimensions: Internal H x W x D (mm)	800 x 800 x 800
Dimensions: External H x W x D (mm)	1305 x 1155 x 1450
Shelves fitted / accepted	3 / 5
Shelf loading each / total (kg)	10 / 20
Configuration	Floor-standing
Max power (W)	9000

HTCR5/1000

Max temp (°C)	500
Min temp (°C)	Ambient +60
Volume (litres)	1000
Temp stability (°C)	±0.5
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	--
Recovery time (mins)	--
Dimensions: Internal H x W x D (mm)	1000 x 1000 x 1000
Dimensions: External H x W x D (mm)	1310 x 1530 x 1635
Shelves fitted / accepted	3 / 5
Shelf loading each / total (kg)	15 / 30
Configuration	Floor-standing
Max power (W)	15000

High Temperature Clean Room Oven - HTCR

HTCR6/28

Max temp (°C)	600
Min temp (°C)	Ambient +60°C
Volume (litres)	28
Temp stability (°C)	±0.5
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	110
Recovery time (mins)	20
Dimensions: Internal H x W x D (mm)	305 x 205 x 305
Dimensions: External H x W x D (mm)	880 x 675 x 885
Shelves fitted / accepted	2 / 2
Shelf loading each / total (kg)	10 / 50
Configuration	Bench-top
Max power (W)	2000

HTCR6/95

Max temp (°C)	600
Min temp (°C)	Ambient +60
Volume (litres)	94
Temp stability (°C)	±0.5
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	110
Recovery time (mins)	20
Dimensions: Internal H x W x D (mm)	455 x 455 x 455
Dimensions: External H x W x D (mm)	1010 x 810 x 1120
Shelves fitted / accepted	3 / 4
Shelf loading each / total (kg)	10 / 20
Configuration	Bench-top
Max power (W)	4500

High Temperature Clean Room Oven - HTCR

HTCR6/220

Max temp (°C)	600
Min temp (°C)	Ambient +60
Volume (litres)	227
Temp stability (°C)	±0.5
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	120
Recovery time (mins)	20
Dimensions: Internal H x W x D (mm)	610 x 610 x 610
Dimensions: External H x W x D (mm)	1160 x 1030 x 1280
Shelves fitted / accepted	3 / 4
Shelf loading each / total (kg)	15 / 30
Configuration	Bench-top
Max power (W)	6000

HTCR6/500

Max temp (°C)	600
Min temp (°C)	Ambient +60
Volume (litres)	510
Temp stability (°C)	±0.5
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	--
Recovery time (mins)	--
Dimensions: Internal H x W x D (mm)	800 x 800 x 800
Dimensions: External H x W x D (mm)	1305 x 1155 x 1450
Shelves fitted / accepted	3 / 5
Shelf loading each / total (kg)	--
Configuration	Floor-standing
Max power (W)	12000

High Temperature Clean Room Oven - HTCR

HTCR6/1000

Max temp (°C)	600
Min temp (°C)	Ambient +60
Volume (litres)	1000
Temp stability (°C)	±0.5
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	--
Recovery time (mins)	--
Dimensions: Internal H x W x D (mm)	1000 x 1000 x 1000
Dimensions: External H x W x D (mm)	1310 x 1530 x 1635
Shelves fitted / accepted	3 / 5
Shelf loading each / total (kg)	--
Configuration	Floor-standing
Max power (W)	15000

Please note:

- Shelf loadings are based on evenly distributed weight
- Minimum operating temperature is approximately ambient +60°C
- The uniform volume is smaller than the overall chamber volume
- Maximum power and heat-up time based on a 240V supply