

Note: Data Sheet For Reference Only - Actual Oven May Vary Depending on Model Year, Options, Controllers, and Individual Configuration



HIGH TEMPERATURE CLEAN ROOM OVEN - HTCR

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*Federal Standard 209E Class 1000 was superseded in 2001 by ISO 14644-1 Class 6 *Federal Standard 209E Class 100 was superseded in 2001 by ISO 14644-1 Class 5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 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)
- | Door switch

OPTIONS (SPECIFY THESE AT TIME OF ORDER)

- | A range of sophisticated digital controllers, multisegment programmers and data loggers with digital communication options is available - more information about controllers
- | ISO-14644-1 Class 5 models are optionally available
- | Access port for independent thermocouple
- | Cable entry ports
- | Lockable door
- | Fixed or castor mounted floor stands
- | Through wall (flange fitted) as well as fully bespoke designs are available
- | Optional floor stand

TECHNICAL DETAILS (MODELS)

	HTCR4/28	HTCR4/95	HTCR4/220
Max temp (°C)	400	400	400
Min temp (°C)	Ambient +60	Ambient +60	Ambient +60
Temp stability (°C)	±0.5	±0.5	±0.5
Temp uniformity (°C)	±5.0 @ 250°C	±5.0 @ 250°C	±5.0 @ 250°C
Heat-up time (mins)	50	90	75
Recovery time (mins)	10	10	16
Dimensions:			
Internal H x W x D (mm)	305 x 305 x 305	455 x 455 x 455	610 x 610 x 610
Dimensions:			
External H x W x D (mm)	880 x 675 x 885	1010 x 810 x 1120	1160 x 1030 x 1280
Shelves fitted / accepted	2 / 2	3 / 4	3 / 4
Shelf loading each / total (kg)	10 / 20	15 / 30	10 / 50
Configuration	Bench-top	Bench-top	Bench-top
Volume (litres)	28	94	227
Max power (W)	2000	3000	4000

	HTCR4/500	HTCR4/1000	HTCR5/28
Max temp (°C)	400	400	500
Min temp (°C)	Ambient +60	Ambient +60	Ambient +60
Temp stability (°C)	±0.5	±0.5	±0.5
Temp uniformity (°C)	±5.0 @ 250°C	±5.0 @ 250°C	±5.0 @ 250°C
Heat-up time (mins)	--	--	75
Recovery time (mins)	--	--	16
Dimensions:			
Internal H x W x D (mm)	800 x 800 x 800	1000 x 1000 x 1000	305 x 305 x 305
Dimensions:			
External H x W x D (mm)	1305 x 1115 x 1450	1310 x 2030 x 1635	880 x 675 x 885
Shelves fitted / accepted	3 / 5	3 / 5	2 / 2
Shelf loading each / total (kg)	--	--	10 / 20
Configuration	Floor-standing	Floor-standing	Bench-top
Volume (litres)	510	1000	28
Max power (W)	7500	12000	2000

	HTCR5/95	HTCR5/220	HTCR5/500
Max temp (°C)	500	500	500
Min temp (°C)	Ambient +60	Ambient +60	Ambient +60
Temp stability (°C)	±0.5	±0.5	±0.5
Temp uniformity (°C)	±5.0 @ 250°C	±5.0 @ 250°C	±5.0 @ 250°C
Heat-up time (mins)	110	105	--
Recovery time (mins)	16	16	--
Dimensions:			
Internal H x W x D (mm)	455 x 455 x 455	610 x 610 x 610	800 x 800 x 800
Dimensions:			
External H x W x D (mm)	1010 x 810 x 1120	1160 x 1030 x 1280	1305 x 1155 x 1450
Shelves fitted / accepted	3 / 4	3 / 4	3 / 5
Shelf loading each / total (kg)	15 / 30	10 / 50	10 / 20
Configuration	Bench-top	Bench-top	Floor-standing
Volume (litres)	94	227	510
Max power (W)	4500	6000	9000

	HTCR5/1000	HTCR6/28	HTCR6/95
Max temp (°C)	500	600	600
Min temp (°C)	Ambient +60	Ambient +60°C	Ambient +60
Temp stability (°C)	±0.5	±0.5	±0.5
Temp uniformity (°C)	±5.0 @ 250°C	±5.0 @ 250°C	±5.0 @ 250°C
Heat-up time (mins)	--	110	110
Recovery time (mins)	--	20	20
Dimensions:			
Internal H x W x D (mm)	1000 x 1000 x 1000	305 x 205 x 305	455 x 455 x 455
Dimensions:			
External H x W x D (mm)	1310 x 2030 x 1635	880 x 675 x 885	1010 x 810 x 1120
Shelves fitted / accepted	3 / 5	2 / 2	3 / 4
Shelf loading each / total (kg)	15 / 30	10 / 50	10 / 20
Configuration	Floor-standing	Bench-top	Bench-top
Volume (litres)	1000	28	94
Max power (W)	15000	2000	4500

	HTCR6/220	HTCR6/500	HTCR6/1000
Max temp (°C)	600	600	600
Min temp (°C)	Ambient +60	Ambient +60	Ambient +60
Temp stability (°C)	±0.5	±0.5	±0.5
Temp uniformity (°C)	±5.0 @ 250°C	±5.0 @ 250°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	800 x 800 x 800	1000 x 1000 x 1000
Dimensions:			
External H x W x D (mm)	1160 x 1030 x 1280	1305 x 1155 x 1450	1310 x 2030 x 1635
Shelves fitted / accepted	3 / 4	3 / 5	3 / 5
Shelf loading each / total (kg)	15 / 30	--	--
Configuration	Bench-top	Floor-standing	Floor-standing
Volume (litres)	227	510	1000
Max power (W)	6000	12000	22000

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