

CR-Series, Class 100 Clean Room Ovens



CR/30

All sources of particulate contamination are fully sealed. The sealed stainless steel interior and glass white epoxy finish make the ovens easily cleaned.

Options:

Over-temperature protection to DIN 12-880 class 2 (recommended to protect valuable contents & for unattended operation) • HEPA filtered airflow available • Digital process control timers & multi segment programmers available • Paperless DAQ (Data Acquisition) graphical recorders available • Top access port for independent thermocouple • Cable access port • Viewing window door • Through door illumination system • Stacking frame to enable units to be stacked one upon another • Key-lock door • Door switch to cut off power when the door is open • Fully customized through wall (flange fitted) designs are available.

Standard features:

- Designed for operation within Class 100 environments (US FED STD 209E) .
- 250°C maximum operating temperature .
- 30 to 1790 Liter chamber volumes.
- Fully sealed low thermal mass insulation to avoid shedding fibres .
- Fully enclosed brush less fan motor .
- PID controller, with single ramp to set-point facility .
- Smooth easily cleaned gloss epoxy exterior
- Polished stainless steel sealed interior enables use of inert gas atmosphere.
- Perforated stainless steel shelves .
- Particle free silicone rubber door seal.
- Membrane control panel with clear bright LED display.
- Double skin construction for cool safe outer case temperature .
- Fully adjustable chamber ventilation.



Model	Max. Temp. (°C)	Temp. Stability (°C)	Temp. Uniformity (°C) @250°C	Heat-up time to Max. (mins)	Recovery time to Max. (mins)	Dimensions		Shelves Fitted/ Accepted	Shelf Loading Each/ Total (kg)	Volume (Liters)	Max. Power (W)	Power Supply
						Internal HxWxD(mm)	External HxWxD(mm)					
CR/30	250	±0.2	±3.0	35	4	310x310x310	655x460x670	2/3	10 20	30	1000	230V single phase
CR/70	250	±0.2	±3.0	35	4	310x470x470	655x620x820	2/5	10 30	68	1500	230V single phase
CR/130	250	±0.2	±4.0	35	4	550x470x470	895x620x820	3/9	10 40	121	2000	230V single phase
CR/180	250	±0.2	±5.0	58	5	770x470x470	1115x620x820	3/15	10 50	170	2500	230V single phase
CR/220	250	±0.2	±5.0	75	4	610x610x610	1130x780x850	3/5	15 45	227	3000	single phase
CR/330	250	±0.2	±5.0	80	6	915x610x610	1440x780x850	4/8	15 60	340	4500	single phase or 3 phase
CR/450	250	±0.3	±5.0	75	9	1220x610x610	1750x780x850	5/11	15 75	450	6000	3 phase
CR/840	250	±0.3	±5.0	-	-	1525x915x610	2050x1065x850	6	15 -	850	12000	3 phase
CR/1790	250	±0.3	±5.0	-	-	1220x1220x1220	1750x1420x1450	5	15 -	1810	18000	3 phase

Minimum operating temperature approximately ambient plus 200°C. Uniformity values are measured in an empty chamber, with vents closed after a stabilization period. Shelf loadings are based on evenly distributed weight



HTCR 6/95 & HTCR 6/28

HTCR-Series, HTCR High Temperature Clean Room

All sources of particulate contamination are fully sealed, whilst the sealed stainless steel interior and gloss white epoxy finish make the ovens easily cleaned. Bespoke ovens are available with pass through construction or with flanges for through wall mounting into the clean room area.

Features:

- Designed for operation within Class 1000 environments (US FED STD 209E).
- 400°C, 500°C or 600°C maximum operating temperatures.
- 28 to 1000 Liter chamber volumes.
- Fully sealed low thermal mass insulation avoids shedding fibres.
- Fully enclosed brush less fan motor.
- 301 controller, with single ramp to set-point facility.
- 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 for cool safe outer case temperature.
- Fully adjustable chamber ventilation.

Options:

- Over-temperature protection to DIN 12-880 class 2 (recommended to protect valuable contents & for unattended operation).
- Digital process control timers & multi segment programmers available.
- Paperless DAQ (Data Acquisition) graphical recorders available.
- Top access port for independent thermocouple.
- Cable access port.
- Viewing window door.
- Through door illumination system.
- Stacking frame.
- Key-lock door.
- Door switch.
- Fixed or castor mounted floor stands.
- Through wall (flange fitted) as well as fully bespoke designs are available.



Model	Max. Temp. (°C)	Heat-up time to Max. (mins)	Temp. stability °C	Temp. uniformity 250°C (±°C)	Recovery time to Max. (mins)	Dimensions		Shelves Fitted/accepted	Shelf loading Each/total (kg)	Vol. (Liters)	Max. Power (W)	Power Supply
						Internal HxWxD(mm)	External HxWxD(mm)					
HTCR4/28	400	50	±0.5	±5.0	10	305x305x305	580x675x885	2/2	10/20	28	1000	230V single phase
HTCR4/95	400	90	±0.5	±5.0	10	455x455x455	1010x810x1120	3/5	15/30	95	3000	230V single phase
HTCR4/220	400	75	±0.5	±5.0	16	610x610x610	1160x1030x1280	3/5	10/50	220	6000	230V single phase
HTCR4/500	400	-	±0.5	±5.0	-	800x800x800	1305x1115x1450	3/5	-	500	7500	single phase or 3 phase
HTCR4/1000	400	-	±0.5	±5.0	-	1000x1000x1000	1310x1530x1635	3/5	-	1000	12000	3 phase
HTCR5/28	500	75	±0.5	±5.0	16	305x305x305	880x675x885	2/2	10/20	28	2000	230V single phase
HTCR5/95	500	110	±0.5	±5.0	16	455x455x455	1010x810x1120	3/5	15/30	95	3000	single phase
HTCR5/220	500	105	±0.5	±5.0	16	610x610x610	1160x1030x1280	3/5	10/50	220	4500	single phase or 3 phase
HTCR5/500	500	-	±0.5	±5.0	-	800x800x800	1305x1115x1450	3/5	10/20	500	9000	single phase or 3 phase
HTCR5/1000	500	-	±0.5	±5.0	-	1000x1000x1000	1310x1530x1635	3/5	15/30	1000	15000	3 phase
HTCR6/28	600	110	±0.5	±5.0	20	305x305x305	880x675x885	2/2	10/50	28	2000	3 phase
HTCR6/95	600	110	±0.5	±5.0	20	455x455x455	1010x810x1120	3/5	10/20	95	4500	3 phase
HTCR6/220	600	120	±0.5	±5.0	20	610x610x610	1160x1030x1280	3/5	15/30	220	6000	3 phase
HTCR6/500	600	-	±0.5	±5.0	-	800x800x800	1305x1115x1450	3/5	-	500	12000	single phase or 3 phase
HTCR6/1000	600	-	±0.5	±5.0	-	1000x1000x1000	1310x1530x1635	3/5	-	1000	15000	3 phase

Minimum operating temperature approximately ambient plus 10°C. Uniformity is measured in an empty chamber with vents closed, after a stabilization period. Shelf loadings are based on evenly distributed weight.

CR1-2, Inert Gas Class 100 Clean room Oven, 200°C, HEPA Filter



MRC clean air ovens incorporate all the special features needed for high temperature clean room work: a fully welded stainless steel interior, two adjustable perforated stainless steel shelves, rapid heat recovery, & two separate LED digital displays for time and temperature that show setpoint or up-to-the-second process information. The controller provides a 24-step ramp and soak, 0.1°C control, & multiple levels of operator access. A sealed membrane touch-pad control panel protects the controllers. These units also have three adjustable air intake and exhaust ducts that are easily removed for cleaning and allow the use of either room or recirculated air. A nitrogen inlet port for purging is standard to prevent contamination. MRC clean room ovens are made with 3.5 inches of high temperature, wrap-around insulation and a high-temp. silicone door gasket. Please note that the filter may be weakened if the oven is operated above 200°C.

Features:

- Horizontal Air Flow
- Encapsulated Insulation
- HEPA Filtration
- Nitrogen Purging
- 24-Step Ramp and Soak PID Controller
- Stainless Steel Interior & Exterior
- Built-in Over temperature Protection
- 24 Month Limited Warranty.

Applications:

Health care Industry

- Annealing the plastics on syringes and catheters
- Adhesive curing & coating curing on pacemakers
- Curing the coating on stents
- Polymerizing contact lenses
- Curing the coating on eye glass lenses.

Manufacturing

- Curing, drying, heating wafers & electronic components
- Epoxy and adhesive curing
- Die bond curing
- Baking of coatings.



Model	CR1-2
Capacity (Liters)	110
Interior dimension (mm)	W432xD508xH510
Exterior dimension (mm)	W890xD737xH965
Temperature range	15°C above ambient to 200°C
Heat-up Time(minutes)	10 to 110°C (35 to 180°C)
Temp. uniformity	±1.0°C at 110°C
Electrical specifications	Volts: 220V Hertz: Watts: 2200 Amps: 12
Temp. recovery time	4 minutes to reach 110°C
Shelves	2 Supplied (8 maximum)