

Controlled Atmosphere Oven - HTMA

General Information

The HTMA series is a range of modified atmosphere high temperature ovens for use with inert atmospheres up to 700°C.

Separate flow controls for purge and process gases mean that once the chamber has been purged of atmospheric air process gas can be used with lower flow rates.

Switching between purge and process gases can either be done manually or by adding the option of an automatic programmable control system. Oxygen levels down to 50 ppm are achievable.



Standard features

- 400°C, 500°C, 600°C or 700°C operating temperatures
- 28, 95, 220, 500 & 1000 litre capacities
- Carbolite Gero 301 controller, with single ramp to set-point & process timer
- Rear mounted fan & side air guides give horizontal 'airflow'
- Fully seam welded to contain modified atmosphere
- Manual gas control via needle valves & flowmeters (nickel brass)
- Corrosion resistant stainless steel interior with perforated non-tip shelves & runners
- Stainless steel pipe-work, nickel brass flow-meter & solenoid valves
- Single side hinged door, with metal heat seal & rubber gas tight seal, closed using non slam handle
- Hard wearing, zinc coated & stoved epoxy polyester coated exterior

Options (specify these at time of order)

- Automatic gas control (requires a 3508 series programmable controller)
- A range of sophisticated digital controllers, multi-segment programmers and data loggers is available. These can be fitted with RS232, RS485 or Ethernet communications
- Stainless steel flow-meter & solenoid valves, instead of nickel brass
- Fixed or castor mounted floor stands
- Flow failure alarm
- Oxygen sensor fitted to gas outlet to monitor oxygen level, displayed as ppm (parts per million) or percentage. Only available for use with nanodac instruments

Technical Specifications

Controlled Atmosphere Oven - HTMA

HTMA 4/28

Max temp (°C)	400
Volume (litres)	28
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
Max power (W)	1000
Weight (kg)	73

HTMA 4/95

Max temp (°C)	400
Volume (litres)	95
Heat-up time (mins)	75
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 880 x 1120
Shelves fitted / accepted	3 / 4
Shelf loading each / total (kg)	15 / 30
Max power (W)	3000
Weight (kg)	99

HTMA 4/220

Max temp (°C)	400
Volume (litres)	220
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)	25 / 30
Max power (W)	3000
Weight (kg)	179

Controlled Atmosphere Oven - HTMA

HTMA 4/500

Max temp (°C)	400
Volume (litres)	500
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)	-- / --
Max power (W)	7500
Weight (kg)	---

HTMA 4/1000

Max temp (°C)	400
Volume (litres)	1000
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)	-- / --
Max power (W)	12000
Weight (kg)	---

HTMA 5/28

Max temp (°C)	500
Volume (litres)	28
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
Max power (W)	2000
Weight (kg)	73

Controlled Atmosphere Oven - HTMA

HTMA 5/95

Max temp (°C)	500
Volume (litres)	95
Heat-up time (mins)	75
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 880 x 1120
Shelves fitted / accepted	3 / 4
Shelf loading each / total (kg)	15 / 30
Max power (W)	3000
Weight (kg)	99

HTMA 5/220

Max temp (°C)	500
Volume (litres)	220
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)	25 / 50
Max power (W)	4500
Weight (kg)	179

HTMA 5/500

Max temp (°C)	500
Volume (litres)	500
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)	-- / --
Max power (W)	9000
Weight (kg)	---

Controlled Atmosphere Oven - HTMA

HTMA 5/1000

Max temp (°C)	500
Volume (litres)	1000
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)	-- / --
Max power (W)	15000
Weight (kg)	---

HTMA 6/28

Max temp (°C)	600
Volume (litres)	28
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
Max power (W)	2000
Weight (kg)	73

HTMA 6/95

Max temp (°C)	600
Volume (litres)	95
Heat-up time (mins)	75*
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 880 x 1120
Shelves fitted / accepted	3 / 4
Shelf loading (each) / total (kg)	15 / 30
Max power (W)	4500
Weight (kg)	99

Controlled Atmosphere Oven - HTMA

HTMA 6/220

Max temp (°C)	600
Volume (litres)	220
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)	25 / 50
Max power (W)	6000
Weight (kg)	179

HTMA 6/500

Max temp (°C)	600
Volume (litres)	500
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)	-- / --
Max power (W)	12000
Weight (kg)	---

HTMA 6/1000

Max temp (°C)	600
Volume (litres)	1000
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)	-- / --
Max power (W)	15000
Weight (kg)	---

Controlled Atmosphere Oven - HTMA

HTMA 7/95

Max temp (°C)	700
Volume (litres)	95
Heat-up time (mins)	105*
Recovery time (mins)	20*
Dimensions: Internal H x W x D (mm)	450 x 450 x 450
Dimensions: External H x W x D (mm)	2140 x 1780 x 1430 (including stand)
Shelves fitted / accepted	3 / 3
Shelf loading each / total (kg)	15 / 30
Max power (W)	12000
Weight (kg)	740

Please note:

- Uniformity is measured in an empty chamber with vents closed, after a stabilisation period
- * Nominal values based upon a representative sample of products
- Minimum operating temperature is approximately ambient +60 °C
- Maximum power and heat up times based on a 240V supply