

CONTROLLED ATMOSPHERE OVEN - HTMA

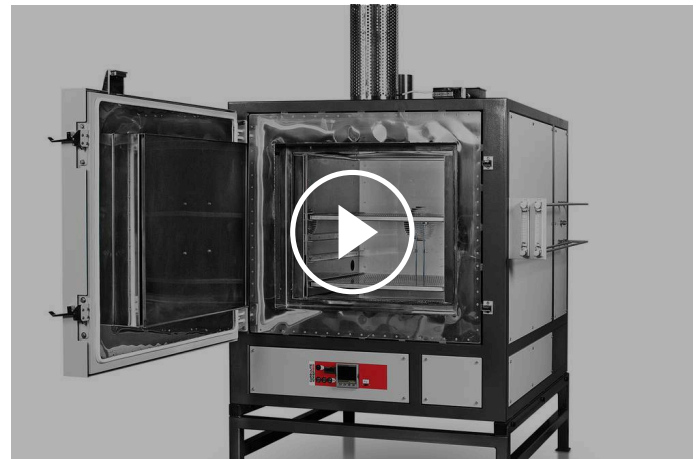


HTMA 6/28 with 3508P1 programmer and automatic gas control options

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.



[Click to view video](#)

Product Video: Controlled Atmosphere Oven - HTMA

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
- | Gas inlet connection: bulkhead compression fitting to suit 10 mm outside diameter tube (maximum inlet pressure = 2 bar)
- | Door switch

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

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EXAMPLES



HTMA 6/28 with 3508P1 programmer and automatic gas control options



HTMA 6/220 with nanodac programmer, automatic gas control and oxygen monitoring options

TECHNICAL DETAILS (MODELS)

	HTMA 4/28	HTMA 4/95	HTMA 4/220
Max temp (°C)	400	400	400
Heat-up time (mins)	60	75	120
Recovery time (mins)	10	16	20
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)	990 x 810 x 885	1120 x 1015 x 1120	1270 x 1165 x 1280
Shelves fitted / accepted	2 / 2	3 / 4	3 / 4
Shelf loading each / total (kg)	10 / 20	15 / 30	25 / 30
Volume (litres)	28	95	220
Max power (W)	1000	3000	4000
Weight (kg)	73	99	179
Shelf loading (each) / total (kg)			

	HTMA 4/500	HTMA 4/1000	HTMA 5/28
Max temp (°C)	400	400	500
Heat-up time (mins)	---	---	60
Recovery time (mins)	---	---	10
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 1530 x 1635	990 x 810 x 885
Shelves fitted / accepted	3 / 5	3 / 5	2 / 2
Shelf loading each / total (kg)	-- / --	-- / --	10 / 20
Volume (litres)	500	1000	28
Max power (W)	7500	12000	2000
Weight (kg)	---	---	73
Shelf loading (each) / total (kg)			

	HTMA 5/95	HTMA 5/220	HTMA 5/500
Max temp (°C)	500	500	500
Heat-up time (mins)	75	120	---
Recovery time (mins)	16	20	---
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)	1120 x 1015 x 1120	1270 x 1165 x 1280	1305 x 1115 x 1450
Shelves fitted / accepted	3 / 4	3 / 4	3 / 5
Shelf loading each / total (kg)	15 / 30	25 / 50	-- / --
Volume (litres)	95	220	500
Max power (W)	3000	6000	9000
Weight (kg)	99	179	---
Shelf loading (each) / total (kg)			

	HTMA 5/1000	HTMA 6/28	HTMA 6/95
Max temp (°C)	500	600	600
Heat-up time (mins)	---	60*	75*
Recovery time (mins)	---	10*	16*
Dimensions:			
Internal H x W x D (mm)	1000 x 1000 x 1000	305 x 305 x 305	455 x 455 x 455
Dimensions:			
External H x W x D (mm)	1310 x 1530 x 1635	990 x 810 x 885	1120 x 1015 x 1120
Shelves fitted / accepted	3 / 5	2 / 2	3 / 4
Shelf loading each / total (kg)	-- / --	10 / 20	
Volume (litres)	1000	28	95
Max power (W)	15000	2000	4500
Weight (kg)	---	73	99
Shelf loading (each) / total (kg)			15 / 30

	HTMA 6/220	HTMA 6/500	HTMA 6/1000
Max temp (°C)	600	600	600
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)	1270 x 1165 x 1280	1305 x 1115 x 1450	1310 x 1530 x 1635
Shelves fitted / accepted	3 / 4	3 / 5	3 / 5
Shelf loading each / total (kg)	25 / 50	-- / --	-- / --
Volume (litres)	220	500	1000
Max power (W)	9000	12000	15000
Weight (kg)	179	---	---
Shelf loading (each) / total (kg)			

	HTMA 7/28	HTMA 7/95	HTMA 7/220
Max temp (°C)	700	700	700
Heat-up time (mins)	90	95	120
Recovery time (mins)	24	24	24
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)	1015 x 860 x 885	1145 x 1065 x 1120	1295 x 1215 x 1280
Shelves fitted / accepted	2 / 2	3 / 4	3 / 4
Shelf loading each / total (kg)	8 / 16		15 / 45
Volume (litres)	28	95	220
Max power (W)	3000	6000	10000
Weight (kg)	85	115	195
Shelf loading (each) / total (kg)		10 / 30	

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

www.carbolite-gero.com/htma