

HVTT High Vacuum Tube Furnaces

Standard features

- ✓ 1200°C & 1500°C maximum operating temperature
- ✓ Capable of 10⁻⁵ mbar vacuum in clean empty worktube.
- ✓ Complete with worktube with inner diameters of either 50, 60, 80 or 75mm
- ✓ Worktube with heated lengths of 450mm, 550mm or 700mm
- ✓ Vacuum provided by two stage rotary sliding vane pump & turbo-molecular pump
- ✓ Manually operated roughing / backing baffle valve
- ✓ Pirani gauge low vacuum monitor
- ✓ Penning gauge high vacuum monitor
- ✓ Worktube connects to the vacuum system via 90° stainless steel radiused connection
- ✓ Access to the worktube is via removable stainless steel vacuum flange
- ✓ Radiation shields at both ends of worktube maintain uniformity without reducing pump speeds
- ✓ The vacuum system & all controls are mounted within the base unit



HVTT TURBO-MOLECULAR HIGH VACUUM TUBE FURNACE

A range of 5 standard units capable of high vacuum operation which also form a base from which bespoke customer designs can be developed in order to meet specific application requirements.

Options

specify these at time of order

- ✦ Overtemperature protection (recommended in all cases of unattended operation or where valuable samples are to be processed)
- ✦ Vertical configurations also available
- ✦ A variety of gas backfill systems are available
- ✦ Additional safety systems for use with combustible atmospheres
- ✦ Automatic & semi-automatic vacuum systems
- ✦ Air or water cooled diffusion pump
- ✦ Oil-free pump options available
- ✦ Cooling water failure alarm
- ✦ Three zone control for improved uniformity
- ✦ Special vertical & custom build configurations
- ✦ 8 or 20 segment programmer
- ✦ RS232/RS484 communications & graphical recorders

Model	Max temp (°C)	Dimensions			Max power (W)	Thermo-couple type	Weight (kg)	Power supply required per phase
		Worktube inner diameter (mm)	Heated tube length (mm)	External Furnace H x W x D (mm)				
HVTT 12/50/550	1200	50	550	1450 x 1700 x 600	2000 1600	N	–	<i>c1</i> =14.5A
HVTT 12/60/700	1200	60	700	1450 x 1700 x 600	3000 1800	N	–	<i>c1</i> =18.5A
HVTT 12/80/700	1200	80	700	1450 x 1700 x 600	3500 2800	N	–	<i>c1</i> =21A
HVTT 15/50/450	1500	50	450	1565 x 1700 x 600	5500 4800	R	–	<i>c1</i> =45A, <i>a2</i> =26A
HVTT 15/75/450	1500	75	450	1565 x 1700 x 600	5500 4800	R	–	<i>c1</i> =45A, <i>a2</i> =26A

c1=220-240V, *a2*=380-415 2 phase + N



Continuous operating temperature is 100°C below maximum temperature. Holding power is measured at the continuous operating temperature.