

High Vacuum Tube Furnace - HVTT

General Information

The HVTT high vacuum turbo-molecular tube furnaces are available in three standard sizes. A range of tube lengths and diameters is available.

The HVTT high vacuum tube furnaces at 1500 °C are available with two work tube diameters.

These high vacuum furnaces are often the starting point for additional customisation such as automated control of gate valves, gas purge, back-fill systems and co-ordinated control of roughing pump with the turbo-molecular high vacuum pump.



Standard features

- 1200 °C or 1500 °C maximum operating temperature
- Capable of 10-5 mbar vacuum in a clean empty work tube
- Supplied with work tube inner diameters of 50, 60 and 80 mm (HVTT 12) or 50 and 75 mm (HVTT 15)
- Heated lengths of 450, 550 mm or 700 mm
- Vacuum provided by oil-free scroll pump & turbo-molecular pump
- Cooling water failure alarm
- Manually operated roughing / backing valve
- Pirani gauge low vacuum monitor
- Penning gauge high vacuum monitor
- Work tube connects to the vacuum system via stainless steel connection
- Access to the work tube is via a removable stainless steel vacuum flange
- Radiation shields at both ends of the work tube maintain uniformity without reducing pump speeds
- All controls are mounted within the base unit

Options (specify these at time of order)

- Over-temperature protection (recommended to protect valuable contents & for unattended operation)
- A range of sophisticated digital controllers, multi-segment programmers and data loggers is available. These can be fitted with RS232, RS485 or Ethernet communications
- Custom built models including a variety of gas backfill systems, automatic & semi-automatic vacuum systems and 3-zone control for improved uniformity is available

Technical Specifications

High Vacuum Tube Furnace - HVTT

HVTT 12/50/550

Max temp (°C)	1200
Dimensions: Worktube inner diameter (mm)	50
Dimensions: Heated tube length (mm)	550
Dimensions: External H x W x D (mm)	1450 x 1700 x 600
Max power (W)	2000
Holding power (W)	1600
Thermocouple type	N

HVTT 12/60/700

Max temp (°C)	1200
Dimensions: Worktube inner diameter (mm)	60
Dimensions: Heated tube length (mm)	700
Dimensions: External H x W x D (mm)	1450 x 1700 x 600
Max power (W)	3000
Holding power (W)	1800
Thermocouple type	N

HVTT 12/80/700

Max temp (°C)	1200
Dimensions: Worktube inner diameter (mm)	80
Dimensions: Heated tube length (mm)	700
Dimensions: External H x W x D (mm)	1450 x 1700 x 600
Max power (W)	3500
Holding power (W)	2800
Thermocouple type	N

High Vacuum Tube Furnace - HVTT

HVTT 15/50/450

Max temp (°C)	1500
Dimensions: Worktube inner diameter (mm)	50
Dimensions: Heated tube length (mm)	450
Dimensions: External H x W x D (mm)	1565 x 1700 x 600
Max power (W)	5500
Holding power (W)	4800
Thermocouple type	R

HVTT 15/75/450

Max temp (°C)	1500
Dimensions: Worktube inner diameter (mm)	75
Dimensions: Heated tube length (mm)	450
Dimensions: External H x W x D (mm)	1565 x 1700 x 600
Max power (W)	5500
Holding power (W)	4800
Thermocouple type	R

Please note:

- Holding power is measured at continuous operating temperature
- Maximum continuous operating temperature is 100 °C below maximum temperature



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



UK Office

Keison Products,

P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.

Tel: +44 (0)330 088 0560

Fax: +44 (0)1245 808399

Email: sales@keison.co.uk

Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.