



Manufacturers of High Temperature & High Vacuum Equipment

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Specification Sheet

Equipment Model: GVAC-1600 Vacuum Furnace

Type	Coldwall, Vertical, Top Loading/High Vacuum
Maximum Temperature	1800° C.
Hot Zone (Nominal)	5.25" (130mm) Dia. X 8.5" (215mm) Deep Nominal
Frame Dimensions	51" (130 cm) W. x 26" (66 cm) D. x 20" (51 cm) H.
Power Requirements	240V 1 Ph. 60A 60 Hz. – 230V 1Ph. 60A 50 Hz..
Gas Requirements	25 – 50 psig, Nitrogen (¼" Swagelok)
Compressed Air	80 – 100 psi (¼" Swagelok)
Element Style	Molybdenum Sheet Element

Process Vacuum at temperature 10^{-6} Torr range. Heat up ramp rate 100° C per minute - empty chamber.
 Vacuum in 10^{-7} Torr range at ambient

Cooling Requirements - 25 psig at 3 gallons per minute.
 Note: Maximum back pressure is 15 psig. (34,000 BTU)

Weight: 420 LBS (190 KG) designed to operate on a standard table modified to 30" high.

Heating elements and heat shields are constructed of Molybdenum. Insulators are made of High Alumina.

Standard Features:

- 300 LP/S Turbo Pump
- Digital Chart Recorder
- Microprocessor Controls - Ramp & Soak
- 19 Programs - 20 Segments per Program
- Sight glass for calibration melts
- Active Braze Control
- Fully Automatic - One button push starts the run.
 Automatically it will:
 - Rough Pump
 - Cross over to High Vac
 - Ramp to Temperature and Soak
 - Cooldown
 - Backfil to ATM

Options:

- Partial Pressure Operation
- Survey Thermocouples (up to 4)
- Tower Indicating Lights - 3 Color
- Computer Controls
- Positive Pressure Hydrogen Operation
- Residual Gas Analyzer
- Cryo, Ion Pumps