



Manufacturers of High Temperature & High Vacuum Equipment

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Specification Sheet

Equipment Model: J-ATM-1200 [18x48] Hydrogen Furnace

Type	Vertical Bell with Integrated Lifting Hoist
Chamber	Stainless Steel Coldwall
Maximum Temperature	1250° C. (2300° F)
Hot Zone	18" (450 mm) Dia. x 48" (1220 mm) H. Nominal
Frame Dimension	54" (137 cm) W. x 34" (86 cm) D. x 145" (360 cm) H.
Power Requirements	480V 3 Ph. 120A 60 Hz – 240V 3 Ph. 240A 60 Hz.
	380/400/415V 3 Ph. 140A 50 Hz.
Gas Requirements	25 – 50 psig, regulated, clean dry Nitrogen
	25 – 50 psig, regulated, clean dry Hydrogen
Vacuum Purge	25 CFM mechanical pump, inline traps and filters
Thermocouple	Type "C" Tungsten – Rhenium // Control & Monitor
Compressed Air	80 PSI regulated, Clean/Dry

Purge gas is Nitrogen.

Process gas is Hydrogen or Nitrogen or a mixture of both.

Process gas can be humidified via a heated bubbler to over 18° C. Dewpoint.

Cooling Requirements - 35 psig, at 10 gallons per minute.

Note: Maximum backpressure is 15 psig. (125,000 BTU load at max temp)

Heat up ramp rate 50° C per minute - empty chamber.

All Molybdenum Hot Zone & Elements. All Insulators are made of High Alumina.

Element style - 1/8" Molybdenum Wire.

Standard Features:

- Burn-off Column
- Bubbler for humidification of process gas
- Equipment on casters to roll into place
- Easy to use Microprocessor Controllers
- Dual Heating Zones for increased uniformity
- 19 Programs - 20 Segments per Program
- Dual Sight glass for calibration melts
- Active Braze Control
- Digital Chart Recorder
- Ethernet connectivity, Webserver and FTP
- Survey Thermocouple attaches to load and controller for tight process control.
- Fully Automatic - One button push starts the run.
 Automatically it will purge → process gas fill →
 ramp to temperature and soak →
 bubbler for humidification of process gas → cooldown → post purge.

Options:

- Extension Table
- Dewpoint Monitor -60 to +40° C
- Tower Indicator Lights
- Survey Thermocouples
- Computer Controls
- Heated "Bubbler" for increased dewpoint
- High Vacuum Operation