

The ultimate resource for **FURNACES**

PRODUCTION AND SERVICE OF FURNACES

Flok al Vacuum-Hydrogen Diffusion Welding Furnace



Features and Benefits

Tested, efficient and safe furnace designs based on our long-term experience:

- Stainless steel hot zone ring assembly
- Bright oxide-free surface finishes for the vacuum trace
- High productivity by using working space to a maximum, and shorter cycles by using rapid cooling systems and a post cooler heat exchanger
- Regulable heating process
- Excellent manipulating performance
- High Ultimate Vacuum Level of better than 1×10^{-3} mbar/hr
- Inner and outer cooling are optional
- Optional loading cart according customers request
- Apply with special wax collection system
- Cost-effective and high performance
- Re-design according customers request

Applications

- Brazing in high vacuum
- Heat treatment of metal material parts
- Diffusion welding
- No deformation and less tension after welding

SPECIFICATIONS

Hot Zone:

Free Work Area Φ 300 X 400 (mm) (Optional Parameters) Operating Temperature 1350°C (Optional Parameters)
Maximum Temperature 1450°C Temperature Uniformity $< + 5$ °C
WorkCapacity 30Kg Pressure 7000Psig
Heating Elements Molybdenum Flat bars Hearth Assembly Molybdenum and stainless

Vacuum pumping system:

Mechanical Roughing Pump 108 m³/hr Booster Pump 5400 m³/hr
Ultimate Vacuum 1×10^{-5} mbar Ultimate Vacuum Level 6×10^{-4} mbar/h

Instrumentation:

Programmer Logical Controller OMRON Temperature Controller YOKOGAWA
Furnace Recorder YOKOGAWA Vacuum Instrument VARIAN or LEYBOLD

Power supply:

HotZone Power 60Kw Heating Rate 15°C/min(<1000°C)
Heating Rate 10°C/m(>1000°C) Working condition Vacuum; hydrogen; Argon

Certified ISO 9001:2000 by



Utilities:

Power Supply 380V+5% 3-phase 50-60HZ
Water 5m³,36 - 60PSIG Inlet 2 Inches Outlet 3 Inches
Inert Gas 0,8m³ per cycle (Nitrogen or Argon)
Compressed Air 0,3m³ per cycle 60 - 85PSIG

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