



The ultimate resource for **FURNACES**

PRODUCTION AND SERVICE OF FURNACES

Flok al Vacuum Welding Furnace



Features and Benefits

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

- Optional shape of vertical and horizontal
- 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/h by using bellows sealed valves
- Repeatability performances
- Inner and outer cooling are optional
- Optional loading cart according customers request
- Cost-effective and high performance
- Re-design according customers request

Applications

Brazing in high vacuum Heat treatment of metal material parts Vacuum extinction of arc tube exhausting and welding in one processing cycle any other heat treatment process.

SPECIFICATIONS

Hot Zone:

Free Work Area 610Wx610Hx914D(mm) 610Wx610Hx1000D(mm) 700Wx700Hx1000D(mm)
 Operating Temperature 800°C (Optional Parameters) Maximum Temperature 1150°C
 Temperature Uniformity $\pm 5^\circ\text{C}$ (1300°C Keeping 1 Hour) Work Capacity 500-800Kg
 Heating Elements Molybdenum Flat bars Hearth Assembly Molybdenum and stainless

Vacuum pumping system:

Mechanical Roughing Pump 2x252m³/hr
 Diffusion Pump 1x32000 liter/s
 Ultimate Vacuum 3x10⁻⁷ mbar
 Booster Pump 1x3924 m³/hr
 System Operating Vacuum Better than 1x10⁻⁵ mbar
 Ultimate Vacuum Level 6x10⁻⁴ mbar/h

Instrumentation:

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

Power supply:

Hot Zone Power 185Kw-200Kw
 Heating Rate 10°C/min (Full Load)
 HeatingRate 10°C/min - 35°C/min (Un-loading)
 Cooling rate <4hr (From400°C to 60°C Full Load)



Utilities:

Power Supply 380V+5% 3-phase 50-60HZ
 Water 6m³, 36 - 60PSIG Inlet 2 Inches Outlet 3 Inches
 Inert Gas 1.5 m³ per cycle (Nitrogen or Argon)
 Compressed Air 0,5 m³ 60 - 85PSIG

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