

High Vacuum Aluminum Brazing Furnace

Model:RVSL-1111

Technical Proposal



* This photo only for reference, the real furnace maybe not 100% similar

1.Usage & Features

The RVSL-1111 high vacuum Aluminum soldering furnace is horizontal type with front door & back door design. High pumping speed oil diffusion pump groups, full metal shield insulation layers, fast pumping speed & inner clean. It's used in aluminum base materials vacuum brazing, finished works keep bright surface & non-oxidation.

The control system was controlled by PLC, Manual or Auto undisturbed switches and alarm function for abnormal condition, high automation and easy operation.

2. Work condition

1. Power : 3 Phase 380V ($\pm 6\%$) ; 50HZ
2. Cooling water: Inlet pressure 0.1 ~ 0.3Mpa ; temp $\leq 35^{\circ}\text{C}$;
3. Cooling water flow rate: about 30 M³/h; PH value about 7; Soft water without any sand or inclusion.
4. Working environment: Environment temperature : $0^{\circ}\text{C} \sim 35^{\circ}\text{C}$; environment humidity $\leq 95\%$ (25°C); Altitude lower 2000m.
5. Compressed air: Pressure 0.4 ~ 0.6Mpa

3. Technical indexes

1. Type: Horizontal type、 Front & back door
2. Max charging capacity (650C) : 1500kg
3. Uniform zone size (mm) : 1100W x 1100H x 1100L mm
4. Ultimate vacuum (cold furnace condition) : $6 \times 10^{-4}\text{Pa}$
5. Pressure rising rate (empty cold furnace condition) : $\leq 0.3\text{pa} / \text{h}$
6. Pumping speed rate (empty cold furnace condition, timing from main valve open till pumping to $5 \times 10^{-3}\text{Pa}$): 35 min
7. Maximum design temperature: 850°C
8. Working temperature: $610\text{C} - 750\text{C}$
9. Heating rate (empty cold furnace condition to 600C): $\leq 40 \text{ min}$
10. Temperature uniformity (vacuum, empty, 600C): $\pm 5^{\circ}\text{C}$ (9 points)
11. Temperature control precision: $\pm 1^{\circ}\text{C}$
12. Heating power: 340KW

- 13.Total power: 450KW
- 14.Max charging pressure (absolute pressure) : 0.10 Mpa
- 15.Cooling way: Vacuum cooling , gas cooling

4. Structure & Capability

RVSL-1111 vacuum furnace was assembled by vacuum system, shell, heating chamber, control system, cooling system, water cooling system, air charging & degassing system, pneumatic system, temperature measuring system,& feeding.