Meeting the needs of the SMT Age

metal circuit boards exclusive use.

Soldering machine of metal circuit boards exclusive use RF-250-8

The RF-250-8 is a hot plate type reflow soldering machine with large heating capacity. Using far-infrared and hot-air heating, it can reflow solder difficult boards requiring large heating capacity such as ceramic and enamel boards, as well as steel, aluminum, and other metal circuit boards.

The carrier-bar (or Teflon sheet carrier) presses the circuit board to be soldered directly on top of the hot plate and slides it along. As the board is directly heated by the hot plate, even boards requiring high heat capacity can be efficiently reflow soldered in a short time and with high temperature precision.

Features

- ∗ 8 zone heating plate makes reflow soldering of enamel or metal circuit boards easy.
- ∗ The RF-250-8 can reflow solder boards measuring up to 150×150×5mm.
- ∗ 8 heating zones in lower section and 1 heating zone in upper section all have digital display and PID control. Full operation can be carried out with high precision at stable temperature.
- ∗ With a heating range up to maximum 400°C, the RF-250-8 can perform high-temperature soldering of over 300°C.

Specifications

• Heating section : 8 zones, (W)150×(L)1600×(H)40mm (at the inlet)
  Preheat section No.1 zone:(W)150×(L)200mm 1.6kW+IR1.2kW
  No.2 zone:(W)150×(L)200mm 0.8kW+IR0.6kW
  No.3 zone:(W)150×(L)200mm 0.8kW+IR0.6kW
  No.4 zone:(W)150×(L)200mm 0.8kW+IR0.6kW
  Reflow section No.5 zone:(W)150×(L)200mm 1.6kW+IR1.2kW
  After heat section No.6 zone:(W)150×(L)200mm 0.8kW+IR0.6kW
  No.7 zone:(W)150×(L)200mm 0.8kW+IR0.6kW
  No.8 zone:(W)150×(L)200mm 0.8kW
  Heating method : Hot plate(1st to 7th zones are up IR heater used together.)
  Temperature control: Max. 400°C, P.I.D. temperature controller.
• Conveyor : Carrier bar (metal fitting to push back of board) system or Teflon sheet carrier system.
  Speed : 50 to 1000 mm/min
  Speed controll : Digital type speed controller.
  Direction : R → L
• Sensor : Thermocouple (CA) (Inside hot plate)
• Cooling : Forced cooling by a fan on the outlet side.
• Power supply : Single phase 240V About 13.6kW, 50/60Hz
• Safety devices : Leak/Over-current circuit breaker,
  Emergency stop switch,
  Alarm output (over/under temperature)
  Signal tower, Torque limiter for chain conveyor
• External dimensions: (W)2370×(D)550×(H)620mm.
• Weight : about 181kg

Applicable circuit boards

Ceramic boards, enamel boards, metal boards, multi layer printed circuit boards. Also, one-side-mounted SMT boards with large heat capacity.

• Dimensions :25mm×25mm to 150mm×150mm
• Board thickness :0.8mm to 5mm
• Height :Max. 40mm

Applications

- Reflow soldering of enamel or metal circuit boards.
- Soldering microchips on radiator or metal block.
- High-temperature soldering of over 300°C.
- Other heating operations for boards with large heat capacity.

Limitations

- Only one-side-mounted circuit boards can be treated.
- Can not process resin boards that warp when heated.

∗ Specifications subject to change without notice.

JAPAN PULSE LABORATORIES, INC.

Main Office : 425-3 Inari-cho, Isesaki-city, Gunma 372-0804 Japan
TEL 81-270-23-1031 FAX 81-270-23-1943
E-mail : info@jpl.com http://www.jpl.com/