



**metal circuit boards  
exclusive use.**

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

The RF-250 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

- \* 5 zone heating plate makes reflow soldering of enamel or metal circuit boards easy.
- \* The RF-250 can reflow solder boards measuring up to 150×150×5mm.
- \* 5 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 can perform high-temperature soldering of over 300°C.

### Specifications

- Heating section : 5 zones, (W)150×(L)1000×(H)40mm (at the inlet)
- Preheat section : No.1 zone:(W)150×(L)200mm 1.3kW  
No.2 zone:(W)150×(L)200mm 1.0kW  
No.3 zone:(W)150×(L)200mm 1.0kW
- Reflow section : No.4 zone:(W)150×(L)200mm 1.3kW+IR1.0kW
- After heat section : No.5 zone:(W)150×(L)200mm 1.0kW
- Heating method : Hot plate (Only the 4th zone is 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 control : Digital type speed controller.
- Direction : R → L or L → R (at user's request)
- Sensor : Thermocouple (CA) (Inside hot plate)
- Cooling : Forced cooling by a fan on the outlet side.
- Power supply : Single phase 220V About 7.5 kW, 50/60 Hz
- Safety devices : Leak/Over-current circuit breaker,  
Emergency stop switch,  
Alarm output (over/under temperature)
- External dimensions: (W)1680×(D)550×(H)391mm.
- Weight : about 120kg

### 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.

### Options

- Operation indication lamp.

\* Specifications subject to change without notice.