



Lead-free N₂ Reflow Soldering Machine RF-460

The model RF-460 is a small Reflow Soldering Machine corresponding to lead-free soldering and using infrared radiation and nitrogen (N₂) for the basic heating. While this is a small table-top reflow machine, it a method with six far infrared (IR) zones, and the precise and stable temperature profile required for lead-free reflow soldering can be obtained. By use of far infrared radiation and nitrogen (N₂), the various requirements for lead-free soldering can be met sufficiently. A max. temperature of 350°C and solder wettability are realized.

Features

- This is a table-top reflow soldering machine with correspondence to nitrogen (N₂). Circuit boards up to 300×300mm can be processed.
- Rapid heating is performed with a 6-zone quartz heater using far infrared radiation and nitrogen (N₂), and the desired temperature profile can be obtained.
- Precise temperature control (±0.3%) up to max. 350°C and stable temperature profiles can be obtained with a high-precision PID temperature controller.

Specifications

- Heating section : 6 zones, W300mm×L780mm×H30mm (at the inlet).
 - Heater : Quartz tube heater, IR (wavelength: 2 to 10 μm).
 - Upper part : Each zone: 0.6kW
 - Lower part : 1,2,5,6zone: 0.6kW / 3,4zone: 0.3kW
 - Heating method : IR + N₂ system
 - Temperature control : Max. 350°C ±0.3%, P.I.D. temperature controller.
 - Temperature control for the atmosphere in the upper part of the furnace for each zone.
- Conveyor : W 300 mm, SUS mesh belt. 90 to 1400 mm/min
 - Conveyor direction: R → L or L → R (at user's request)
 - Digital speed controller
- Cooling : Forced cooling by a fan on the outlet side
- Power supply: Single phase 200V 6.7kW / 220V 7.8kW, 50/60 Hz
- N₂ supply quantity : About 20 to 50l/min
 - (Oxygen density: about 1000 ppm).
- Safety devices : Leak/Over-current circuit breaker,
 - Emergency stop switch, Alarm output
 - (over/under temperature / heater disconnection)
- External dimensions: (W)1500×(D)590×(H)640mm,
- Weight : about 150kg.

Applicable circuit boards

- Dimensions : 15mm×15mm to 300mm×300mm
- Board thickness : 0.125mm to 2mm
- Height : Max. 30mm

Applications

- Reflow soldering of SMT circuit boards.
- Lead-free reflow soldering.
- Drying of thermosetting adhesives and other heating work.

★ Specifications subject to change without notice.