Resistance Reflow Soldering Systems



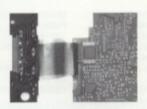
Reflow Soldering for Edge Connectors and Tape Cables

The Model HRS-80 reflow solder station is a bench-top system that reflow solders edge connectors or flexible circuits to printed circuit boards in a single operation. This semiautomatic system features a high cycle rate and repeatable, high quality reflow soldering of difficult, high density components.

Operation is simple. Parts to be soldered are placed on an airdriven transfer slide, then two OSHA-safe palm buttons are pressed to activate the system. The slide transfers in under a vented, interlocked hood, then a VTA-71 weld head brings down a shielded hot ram heater bar. This heater bar compresses a thin spring-loaded, non-wetting intermediate contact bar against the materials to be soldered. A controlled application of heat and force allows for a predetermined and timed cycle.

At the end of the heating cycle, the heater bar retracts approximately .050 inch; the intermediate bar remains in place to hold the parts while the solder solidifies. A timed cooling air blast is directed on the work area, solidifying the solder. The head then returns to the full up position and the slide automatically transfers out for board removal and reloading.





SPECIFICATIONS • Model HRS-80

Joining method	Hot ram reflow soldering multiple lead
Input requirements	
Power	115 Vac, 60 Hz, 10 A circuit (230 V-50/60 Hz optional)
Air	80 psi
Solder requirements	
Board	1 mil minimum (less with flex circuits)
Device	1 mil minimum (less with flex circuits)
Operation	Semiautomatic, manual loading
Production rate	300 per hour
Temperature range	0 to 600°C
Heat control	Pyrometer, thermocouple controlled
Pressure range	2-50 lb (1 to 23 kg)
Heater bar length	2.90 in standard, up to 4.00 in maximum (74 mm to 102 mm)
Connector span	Up to 12 in (305 mm), with left/right board shuttle
Heating time and cooling time	1-17.5 sec (3 sec typical)
Part holding fixture	Made to order
Dimensions (H × W × D)	20 × 20 × 25 in (508 × 508 × 635 mm)
Weight	67 lb (30 kg)