

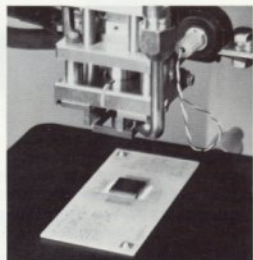
Model TCW-119A

Semiautomatic Reflow Solder System



Operation

An operator hand-loads the LSI chip by dropping it into a positioning plate holder, then activates dual safety pushbuttons. The reflow head automatically slides to position over the LSI device, picks it up by vacuum and places it accurately on the printed circuit board. Pulsed heat then reflow solders four sides simultaneously. The solder is cooled by timed air flow while the device is held in correct position by a cooled pulsed heater bar assembly. After cooling, the reflow solder head retracts. The operator slides the positioning table and removes the completed printed circuit board.



Now you can easily and accurately mount four-sided flat-pack large scale integrated circuit (LSI) devices onto printed circuit boards, ceramic substrates and other surfaces. With the Hughes Model TCW-119A semiautomatic reflow solder system, LSI chips are reflow soldered by a pulsed heat method. This allows precise control of temperature and also makes it possible to remove defective LSI devices. The versatile system's automatic sequence of operation allows relatively unskilled operators to solder with a high degree of reliability.

Benefits

- Automatic placement of LSI devices eliminates manual pre-positioning and tack soldering.
- Temperature and force are precisely controlled for uniform quality and improved yield.
- Rapid pulsed heat method prevents heat damage, allows easy removal of defective chips.
- Elimination of pre-soldering step improves throughput.

SPECIFICATIONS • Model TCW-119A

Input power	220 Vac, 50-60 Hz, single phase 40 A
Compressed air	4 kg/cm (57 psi) and 5 cu ft/min
Soldering method	Pulsed heat with 4-sided reflow
Heating temperature	100°C to 590°C
Heating time10 to 5.9 sec
Cooling time	0-9.9 sec
Electrode force	17 to 75 lb (8 to 34 kg)
Stroke	1.95 in (50 mm)
Throat depth	13.65 in (347 mm)
PCB size	7.8 x 11.7 in (198 x 297 mm) max.
LSI size39 to 1.17 in (10 to 30 mm) overall at tips of leads
Dimensions (H x W x D)	49 x 39 x 27 in (1245 x 991 x 686 mm)
Weight	550 lb (249 kg) net, 682 lb (309 kg) shipping