

AUTOMATIC MICRO-WELDING



Free-standing and full automatic station for welding strips over a lead frame or other metal bases for the production of electronic packages, microbatteries, power devices and other applications in electronic.

APPLICATIONS

The Aurel Welding Station is a free-standing and full automatic machine for welding metal strips over lead frames or other metal bases for IC production and other applications in electronic.



Close-up of the welding area

The machine could be mainly composed of a shuttle for the automatic loading/unloading of the tray (where the lead frame or other bases are placed), a welding head with two parallel electrodes and spools for feeding the strips.

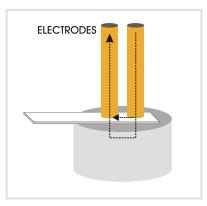
The machine could be equipped with a digital camera connected to the PC and TFT monitor for checking the presence and positioning of the lead frames before soldering.

The welding cycle parameters are fully PC programmable (up to 64 storable welding recepies).

PARALLEL GAP WELDING

Gap Welding is the process of bonding two parts together by placing both electrodes against the same surface on just one part. Weld current flows from one electrode through the top part and partially into the bottom part before returning to the power supply via the second electrode (see figure).

Gap Welding may be the only viable bonding method when electrode access is limited to one part or the part materials preclude the use of pulsed YAG laser welding.



Typical parallel gap welding application



Welding strip feeding spools

SPECIFICATIONS

Carriage repeatibility: 0.010 mm Dimensions: 730 x 860 x 1420 mm

Weight: 175 kg

Control system: PC, Windows 7

Welding parameters control: up to 64 recepies

Compressed air: 5 Bar

Power supply: 230V - 50Hz - 2A

Control voltage: 24 Vdc

Digital camera TFT monitor

