

Solderability Test Machine



Machine Specification

Temperature	: Degree's C or F
Max solder temp	: 300°C
Immersion range	: 0.5 - 20 sec.
Depth resolution	: 0.1 mm
Dwell time	: 0 - 19.9 sec.
Warm	: 30 mins aprox
Temp resolution	: + /- 1°C
Dip depth	: 0 - 30 mm
Rotary depth	: 0-3 mm
Dip/withdraw speed	: 1-50 mm/sec
Power consumption	: 600W
Voltage	: 110/120 or 220/240
Dimensions	: W675 x D590 x H440 (mm)
Weight	: 30 kgs
Internal solder pot dims	: L197 x W94 x D38 (mm)
Solder pot capacity	: 7 kgs

Model 89-H-1

The CEMCO Multifunction Solderability Tester is designed to carry out the Rotary, Vertical Dip and Solder Globule test functions.

The machine features a Siemens PLC and operator display screen with touch pad control and a RS232 output for logging or printing test data. The system includes a self-calibration procedure that is performed prior to test initiation. The internal mechanism and solder bath is mounted on a rigid steel framework and housed within an easy clean GRP cover.

Rotary Test

The Rotary Solderability Test is designed to perform in accordance with IEC 68-2-20 Test Tc and ANSI/J-STD-003 4.2.2 Test B for assessing the solderability of printed circuits by simulating wave soldering conditions. A specification sample is mounted within the titanium holder. The dual-speed drive quickly rotates the sample near to the solder surface and automatically switches to the operator set immersion period, which is regulated between 0.5-19.9 seconds. Solder temperature, immersion depth and time is displayed on the touch screen.

Vertical Dip Test

The Vertical Dip function performs the tests described in IEC 68-2-20 test Ta and ANSI/J-STD-003 4.2.1 Test A for determining the solderability of wires, tags, component leads and terminations of irregular form. The sample is mounted in a purpose made clamp while in the 12 o'clock position. The clamp arm rotates 180 degrees prior to carrying out the vertical movement according to the prescribed immersion, dwell and withdrawal parameters. On completion of the test the arm returns to the 12 o'clock position.

Solder Globule Test

The Solder Globule Test IEC 68-2-20 test T clause 4.8 provides a procedure to measure the soldering time of round wire terminations. The wire is held in a special fixture and lowered into a globule of molten solder. At the moment when the solder wets the wire, the operator presses a button to record the time elapsed since the wire entered the solder globule.