### **SPIRAL VISCOMETER PM-2**



## **SPIRAL VISCOMETER PC-1TL**



#### MODELS : PM-2A, PM-2B, PM-2C

- M The PM-2 hand held digital viscometer allows measurements of solder paste to be made either in containers or directly on the screen printer.
- M The easy to read, high contrast LCD shows viscosity and temperature of the tested sample.
- M Fixed shear rate and shear time insures that no complicated calculations are required.
- M As with all Malcom viscometers, that PM-2 satisfies several international standards including IPC, JIS and ISO.

### MODELS: PC-1TLA, PC-1TLB, PC-1TLC

- M More accurate and repeatable than the PM-2, the PC-1TL is a table top digital viscometer incorporating the patented Malcom spiral pump method. The system comes complete with a temperature sensor.
- M The PC-1TL is not user dependent with a repeatability of +/- 2 percent.
- M With optional cylinder sets, the PC-1TL can be used to measure a wide range of fluids.
- M The PC-1TL is widely used for incoming inspection and rheological analysis of materials.

# **SPIRAL VISCOMETER PCU-200**



### MODELS : PCU-201, PCU-203, PCU-205

- M The PCU-200 series viscometers are laboratory grade digital viscometers that allow even first time users to get accurate repeatable results.
- M The PCU-200 series units come with a built in thermal printer for logging test results.
- M The units also come with built-in temperature controllers to maintain temperature during testing.
- Acquisition of viscosity data for rheological analysis can be performed automatically with optional software (standard on the PCU-205).

## SOLDER PASTE WETTING TESTER SP-1

#### **MODEL: SP-1**

- M The SP-1 Wetting Tester simulates the actual temperature profile of your reflow oven to see how your paste will wet in production.
- M The built-in heater can be adjusted to find the optimum reflow profile for maximum wetting of a given solder paste.
- M The system can also be used for testing the wettability of not only solder paste but also components and PCB substrate pads.
- M The systems software allows the user to compare up to six wetting curves at a time.



## SOLDER PASTE TACKINESS TESTER TK-1

### **MODEL: TK-1**

- M The TK-1 Tackiness Tester offers three convenient methods for measuring solder paste tackiness, allowing you to determine component drop-time due to loss of adhesion, and thus avoid costly rework.
- M Quantifies solder-paste tackiness.
- M User-variable measurement conditions (time, preload, depth and speed).
- M Digital display of measured tackiness, real preload and real insertion depth.
- M Satisfies international standards including IPC and JIS.



### SOLDER PASTE SOFTENER SPS-1 / SPS-2

### MODELS : SPS-1 (jar), SPS-2 (jars)

- M Unlike hand-mixing, the SPS Soldering Paste Softener provides uniform paste consistency regardless of operator skill. Total processing time from refrigerator to screen printer is approximately 15 minutes.
- M Uses off-the-shelf, airtight containers so oxidation and humidity are no longer a concern.



# **REFLOW CHECKER RC-9**

#### **MODEL: RC-9 Series**

- M The individual models of the Malcom RC-9 Reflow Checker series record accurate, board level temperatures by using a memory module that rides on the conveyor belt or your reflow oven along with your RGB's. By inserting the memory unit into the printer/adapter, temperature data is transferred and then displayed in either data list form or in a temperature profile by selecting the specific option.
- M Color print outs provide easier interpretation of collected data and graphs.



## **REFLOW CHECKER PC INTERFACE TYPE RCP-1**

#### **MODEL: RCP-1**

- M Instead of using a printer/adapter, an Computer Interface (RCP) unit is used, along with Malcom TAM-2 thermoprofiling software to download the temperature information to the operator Personal Computer.
- M The Dos-based TAM-2 software has many features including the ability to allow the operator to analyse the temperature profile for each of the channels, to compare the actual results with those sought, and so-on.



## **REFLOW SIMULATOR RS-1**

### MODEL: RS-1

- M RS-1 Reflow Simulator allows the operator to observe reflow in a simulated reflow environment.
- M Operator can creates a temperature profile approximating that of a reflow oven.
- M Nitrogen environment can be created as well.
- M A software option (TAM-2R) is available which allows the operator to analyse the results of reflow temperature simulation.



## DIP TESTER DS-02 / DS-03

#### **MODEL: DS-02, DS-03**

- M Designed to attain vital soldering performance information of a dual wave soldering system.
- M The self contained DS-02/DS-03 rides along the conveyor just like a PCB.
- M Measures and records maximum underside preheat temperature.
- M Confirms flux and solder levels (DS-03 only).
- M Measures and records the maximum temperature and dwell times of both solder waves.



### **DIP TESTER DS-05**

#### MODEL: DS-05

- M Designed to attain vital soldering performance information of wave soldering system.
- M The self contained DS-05 rides along the conveyor just like a PCB.
- M Measures and record two (2) points for preheat temperature and three (3) points for dip time.
- M Possible to move each sensor to position desired and measure conveyor speed.



# FLUX CONTROLLER MS-5A / MS-5A S.S. / MS-108

#### MODEL : MS-5A, MS-5A S.S., MS-108

- M Fully automatic measurement and control of specific gravity and liquid level.
- M Digital display shows specific gravity and temperature.
- M Digital display shows liquid contamination rate (MS-5A & MS-5A S.S. only).
- M Built-in temperature compensation circuit.
- M Empty alarm and output for relay contact.
- M Two selectable specific gravity ranges (MS-5A S.S. only).



## **PASTE PRINT INSPECTION TD-3**

#### **MODEL: TD-3**

- M The TD-3 Automatic Paste Print Inpection System can measure printed solder paste height and widths at up to 100 user specified locations. Automated X/Y movement insures accurate board to board comparisons of the same locations. After inspection, data can be viewed or printed as a table, graph or color profile.
- M The system is also capable of performing automatic 3-D volume calculation of given locations.



## **INLINE LASER PRINT INSPECTION SYSTEM ID-1S**

### **MODELS : ID-1S**

M This full inline system allows the user to check up to 2000 preprogrammed locations to automatically verify solder paste fine pitch, BGA, CSP components, appearance, height, shape, and volume.



