

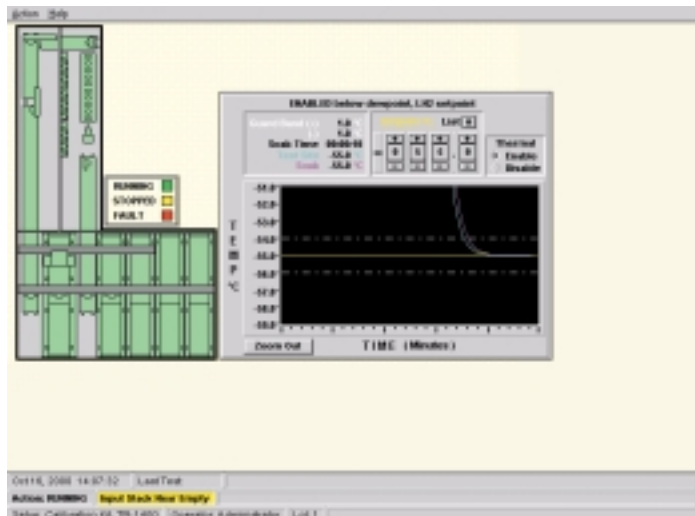
Model 1400/3000 Series IC Test Handlers



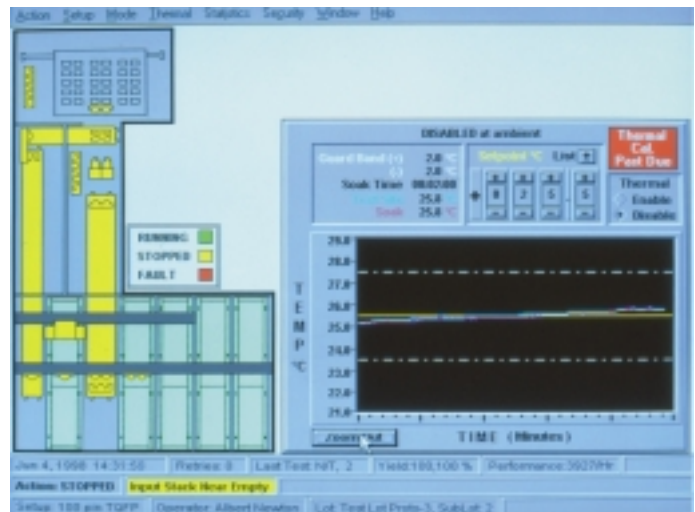
AETRIUM[®]

Experience, Technology, Solutions

Aetrium Series 1400/3000 IC Test Handlers are well suited for production volumes of surface mount devices. Device kits are available for PGA, LGA, PLCC, QFP, TQFP, BGA, uBGA, leadless packages, Chip Scale Packages and other packages up to 50 mm x 50 mm. The 1400/3000 handlers can operate over the full temperature range of -55°C to $+155^{\circ}\text{C}$ and can be configured in either single or dual test sites.



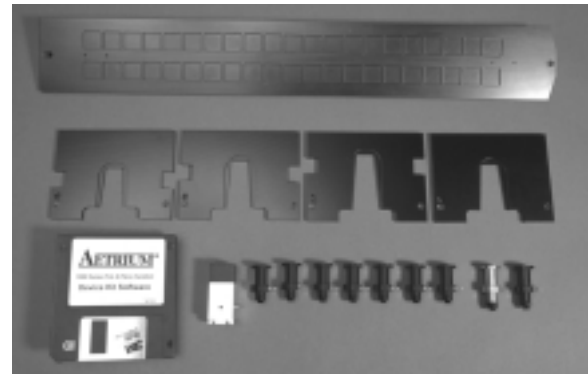
1400 User Interface



3000 User Interface

Diagnostic and Graphics User Interface

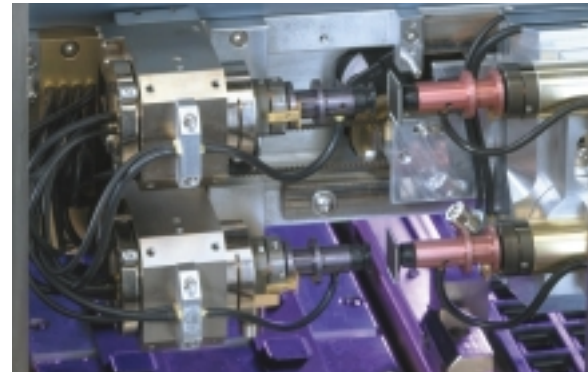
- On the fly diagnostics isolate all actuators during operation, eliminating the need to purge the handler.
- Windows™ operating system.
- Online help screens.
- Real time error logging.



*1400 device kit for components in trays ...
no mechanical adjustments needed.*

Fast Changeover Time

- Complete package changeover in 20 minutes or less.
- All changeover kit components are pinned or otherwise positively positioned, eliminating adjustments.
- Menu driven setup using the device kit library.
- Tool-less changeover.



Dual precursors provide continuous device placement accuracy prior to pick-and-place operation.

Simple Access and Device Handling

- Device path is completely accessible and visible throughout the handler.
- Rapid recovery lowers mean time to assist (MTTA).
- Rotational capability for pin 1 orientation.
- Plunge-to-board contacting.



Plunge-to-board device probes transfers device to output sorter in dead-bug orientation to virtually eliminate lead damage.

Specifications

Applications

Package Types	BGA, PGA, LGA, QFP, TQFP, PLCC and TSSOP
Device Size	Model 1400 – 5 x 5 mm up to 50 x 50 mm Model 3000 – 5 x 5 mm up to 40 x 40 mm

Environmental

Temperature Range	Ambient only Ambient to +155° C -55° C to +155° C
Accuracy	Test site ± 1° C Part flow path ± 3° C
Heating	Convection with programmable cut-off
Soak Time	Operator programmable

Contactors

Type	Third party socket
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Input/Output

Input/Output	1 stack (holds up to 12 trays) 4 stacks (holds up to 12 trays each) with programmable sort locations
Throughput	Model 1400 – up to 1400 UPH with an index at 0.90 seconds Model 3000 – up to 3200 UPH with an index at 0.75 seconds
Test Site	Model 1400 – single Model 3000 – single or dual
Package Conversion	20 minutes or less typical

Tester Interface

Digital	Parallel, RS-232 or GPIB
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Controls

Display	Color GUI
User Interface	With trackball and programmable display buttons
System 3000	Windows NT™
System 1400	Windows 3.1

Physical Dimensions

Model 1400	Weight – 1100 lbs. (449 kg) Footprint – 45 inches (114 cm) x 87 inches (221 cm) Height – 55 inches (140 cm)
Model 3000	Weight – 1300 lbs. (590 kg) Footprint – 49 inches (124 cm) x 87 inches (221 cm) Height – 55 inches (140 cm)

Utilities

Air Supply	Dry filtered air to 5 microns at 40 PSIG
Electrical	200-240 VAC 50/60 Hz, 1 phase 30 amps
Vacuum	20 in. Hg at 0.7 SCFM
Nitrogen	LN2 (customer supplied)

Specifications subject to change without notice.



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