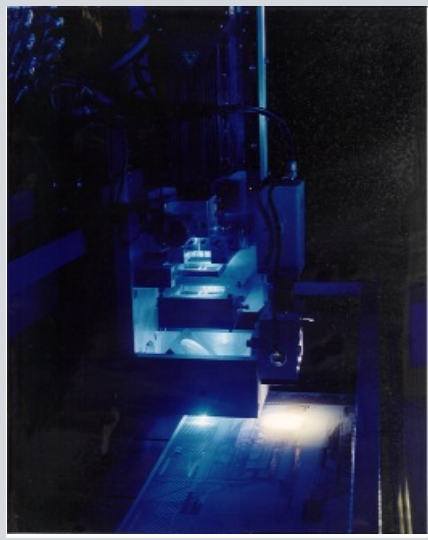


***phasor* is a fluorescent / CCD based Automatic Optical Test (AOT) system from Lloyd Doyle, suitable for optical test of contemporary laminates.**



It offers for the first time, the ability to optically test PCB layers using a combination of fluorescent illumination and high resolution CCD camera technology. *phasor* is a development of the Lloyd Doyle AOT range and complements the reflective light *EXCALIBUR* and *redline* ranges of equipment.

phasor utilises the fluorescent properties of the base material to form an accurate working image of the pcb for fault analysis. The Lloyd Doyle proprietary AOT algorithms are then employed, giving unbeatable fault detection with no false alarms - the results are higher yields for the board manufacturer. *phasor* is suited for use on the majority of pcb types but is particularly suitable for the test of low contrast materials, reverse treated coppers and double treated coppers. In addition, *phasor* is suitable for advanced applications on Microvia boards and sequential build up technology boards. *phasor* is available with various configurations, with options for scan speed, scan size, resolution and BGA applications.

A detailed specification appears overleaf.

SPECIFICATION

Panel Size:

Approximately 30" x 30"
(760mm x 760mm)
Extended formats up to
39" x 78"
(1 metre x 2 metres)

Inspection Size:

20" x 25"
(500mm x 635mm)
Extended formats up to
36" x 75" (915mm x 1980mm)

Resolution:

Scan time for 18" x 24"
(460mm x 610mm) area at 10.0 micron
resolution suitable for 0.0035" (80micron)
line/space minimum 14 secs.
Scan time for 18" x 24"
(460mm x 610mm) area at 7.5 micron
resolution suitable for 0.0025" (60 micron)
line/space minimum 24 secs.

Master Sources:

CAM generated netlist -from any
proprietary CAM station.
CAM generated bitmap -from

Faults Detected:

All functional and cosmetic faults found.
any proprietary CAM station.

Fault Verification and Repair:

On-line using CCTV
Off-line using:
Optional Pen marker system
SABRE repair stations

Dimensions:

Width 1.71m
Depth 2.85m
Height 1.60m
Weight 2150kgs

Materials:

Most production materials including:
Bare Copper
Treated Copper
Pb/Sn
RTF/DSTF

Product Types:

Signal images
Power/ground images
Mixed signal/power/ground images
Drilled, SMD and mixed pattern outer layer
Microvias

Facilities:

LAN connection for all data
communication
VDU and CCTV fault images
Multi-language display
Engineering diagnostic tools
Software upgrades

Options:

Large format scanning up to 1m x 2m
maximum.
Pen marker system for fault identification.
On-line fault report printing.
High resolution optical systems
Additional cameras to give dual camera
systems.
Extended storage HDD

Machine range:

Phasor - 10.0 micron, 7.5
micron or 5.0 micron.



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