

HIGH SPEED COMPONENT VERIFIER

PN: CV-1M

CUSTOMER SATISFACTION.....“Whatever it takes”

COMPONENT VERIFIER DESCRIPTION

The CTI Component Verification machine's function is Inspection of critical components on an assembly.

It was developed to check part numbers on high Lead count QFP's prior to reflow to catch parts that were loaded incorrectly into the pick and place machine by and operator.

Once in production, it was evolved to do much more. It uses PCB fiducials to get an accuracy fix on its targets, then it is ready to inspect for missing parts, check for correct part numbers on components, check bar code label, check for components skew, and inspect for correct parts in given locations.

Programing is point and click. Simply insert a known good product, jog the camera over the area of interest and press teach. Programing can also be done off-line from DXF or script.

Precision movements are accomplished using servo drives and precision THK ball screws.

The front of the machine has front opening door and a sliding top to allow the operator full access to the work area.



STANDARD FEATURES

- ▶ Conveyor with stops and edger's for positioning product
- ▶ Light tower with alarm
- ▶ Interface to send results to customer's database
- ▶ Three Axis closed loop servo gantry control (X/Y/Z)
- ▶ Component inspection camera also reads fiducial and bar code labels
- ▶ Easy teach programming
- ▶ Steel welded frame



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SPECIFICATIONS

Gantry

System Type	Closed loop Servo (3 axis)
X/Y/Z Speed	Programmable, 750 mm/s max
X/Y/Z repeatability	+/- .025 mm
Positional resolution	.005 mm
Work Area	480mm (W) x 520mm (L) x 100mm
Typical Cycle Time (12 reads)	24 Seconds

Gantry Head

Camera	GigE
Programmable Z-axis	Yes
Fiducial correction	Yes
Bar code reader	Yes

Conveyor

Conveyor Type	Edge Belt
Edge clearance	3mm
Max width	480mm (18 Inches)
PCB Stop	Yes
PCB edge clamp	Yes
Conveyor Speed	Variable (10-25 M/s)
Conveyor Height	940mm +/- 50mm
Compatibility	SMEMA
Product weight	15 pounds

Facilities

Footprint	1000mm width X 1100 mm depth
Power	200/240 VAC – 10 Amp
Air Supply	610 kPa (90 psi) @ 4 CFM max

Programming

Hardware	Industrial PC
Operator Interface	15 inch touch screen
Software	Windows based CTI inspectware
Teach By Camera	Yes
Off line programming capable	Yes, from DWG/DXF or stitched image

General

System weight	425Kg
Frame Construction	Steel welded