

Fine Pitch Contacting KT-MCS-500

Benefits

- Vision Guided Needle Alignment
- 500 Test Points
- Upper and Lower Multi Level Contact
- Minimum Test Pad Size 150 μm
- 10 μm Accuracy, 1 μm Resolution
- Process safe contacting of tiny test pads
- Usable on PCBs and LTCC structures
- Usable with Flex PCBs
- Contacting of mini connectors



Overview

The Konrad Fine Pitch Contacting Station MCS-500 is a state-of-the-art solution for testing printed circuit boards and low temperature co-fired ceramic structures at high speed with high accuracy. This system is the answer for today's challenges in test engineering:

- Products become smaller and more complex
- Many products have less test pads
- Test pad size becomes smaller

Due to these tendencies, testing of such products becomes more difficult and classical spring-loaded test probes can't be used any more in production test in many cases. The Konrad Fine Pitch Contacting Station MCS-500 uses a patented architecture and combines rigid needle adapters with a vision inspection system and multi-axis motion control system for a process safe micro-alignment of the devices under test.

Alignment System

- Realtime motion control system with three axis
- X-Y- ϕ positioning
- Programmable trajectories
- Needle force adjustable
- Integrated vision system for closed loop positioning
- Vision system based on LabVIEW / IMAQVision
- Camera with telecentric lens
- Precise algorithms for camera lens calibration
- LED lighting, mirrored in
- Integrated DUT marking system (PASS, FAIL) per DUT or per panel
- Automation PC, embedded Windows XP

Technical Data

Minimal Test Pad Size:	150 µm
Fine Pitch minimal:	200 µm
Contacting repeatability:	< 10 µm
Theoretical resolution positioning system:	< 1 µm
Simultaneous contacting top and bottom	
Max. number of contacting probes:	300 per side (top/bottom)
Automated PCB Insertion	
Max. PCB size:	220mm x 300mm

Applications

- IPCB Panel Test
- Functional Test
- In-Circuit Test
- In-System Programming
- Stand-alone or inline use

Summary

Evaluating the latest trends in miniaturization, Konrad has developed the high precision Fine Pitch Contacting Station MCS-500 for high volume production test of extremely small structures and test pads up to 150 micrometer with 10 micron accuracy. This technology helps manufacturers of products with very small contact areas to handle and test these products reliably and at the same time increase throughput while reducing the overall test costs.



Additional Informations: www.konrad-technologies.de

Konrad GmbH

Fritz-Reichle-Ring 12 – 78315 Radolfzell – Germany
T: +49 (7732) 9815-0 F: +49 (7732) 9815-104
info@konrad-technologies.de

International Branch Offices: <http://www.konrad-technologies.de>