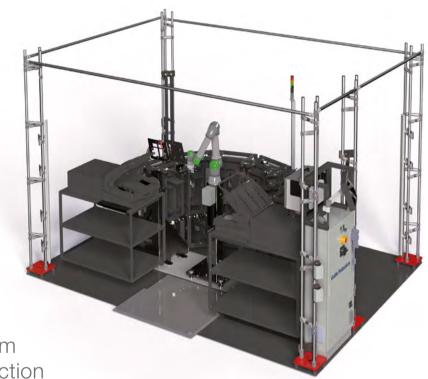


Automatic testing of electronic assemblies Robot-In-Circuit-Tester

Powered by pi4



Customer benefits

- + Open system concept
- + Quick and safe test system connection and disconnection
- Parallel testing of different types of circuit boards
- Monitoring of all contact forces by force sensor
- Integration of the test system, manual and automatic testing possible
- + Safety concept with optical safety fence/light curtain

Robot handling system for automatic testing of electronic assemblies with optimal comfortable accessibility due to a safety concept without safety fencing.

High utilization of your test systems through fast, safe and simple connection. The testers are mechanically fixed and coupled with the communication and safety system of the complete system. This allows plug-and-play connection of different testers to the system. The test robot recognizes the connected test system via digital identification. The test systems can be disconnected and separately operated manually for small series.

Up to two test systems can be simultaneously docked. This allows either identical or different products to be simultaneously tested.

Provision has been made for three magazines for each tester. One magazine for the supply of printed circuit boards, a second magazine for circuit boards that have been tested and found to be in-order (IO) and a third magazine for not-in-order (NIO) tested circuit boards.

The six magazines can be operated manually or optionally with automated guided vehicle (AGV) loading and unloading. The magazine types are optionally detected with RFID or code readers.

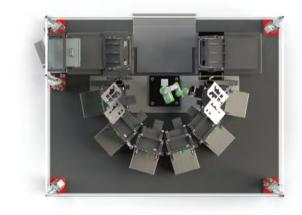
The integrated robot automatically removes the printed circuit boards from the magazines. Alignment and positional tolerances of the printed circuit boards in the magazines are detected and automatically balanced by optical sensors in the gripper. The integrated calibration camera allows the user to visually check at freely selectable intervals whether deviations in gripping precision have crept in.

The forces acting on the product throughout the entire handling process are controlled and recorded by means of a force sensor integrated in the wrist of the robot.

Front, side and top view







Technical specifications

| Machine size L x B x H | 3760 x 2850 x 2600 mm |
|------------------------|-----------------------|
| Robot reach | 850 mm |
| Max. board weight | 3 kg |

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