

SPECIAL MACHINES

Application: SMD Component Tester



The manufacture of modern electronic equipment (mobiles, consumer, white goods and industrial electronics) requires many millions of individual electronic SMD components (resistors, capacitors, diodes, transistors etc.) every day. Each of these parts must be individually tested, before it is assembled onto a PC-board.

Product: SMD Component Tester

Special component testers have been developed, which can perform component testing automatically. Typically these machines can process up to 10,000 individual surface-mount devices (SMD) per hour!

These machines accept parts, which can be picked up from a "hopper", identified and correctly orientated with the help of an image recognition system. The parts are

then fed to a carousel (with 12 individual fingers and test positions within 360°). Approximately 3 times per second this carousel is stepped by 30° and the test probe makes contact with the part. On ejection from the carousel the good and the bad parts are separated accordingly.

MACCON contribution

For this component tester, MACCON has designed and manufactures special rotary actuators, which support the high-speed indexing needed to position each new part under the test probe. These actuators (housed torque motors with precision encoders) have robust bearings and are manufactured to very high standards. This allows the user to assemble his machine around these actuators without the need for further precision mechanics.

