

Compact by Design

Multi-Probe Test Equipment

Microchip Package Manufacturing

Application Challenge

A manufacturer of equipment to test microchip packages required a smaller cylinder to fit into their design envelope for a new machine. Initially using a competitor's 40mm x 25mm product, they realized they did not have enough room. Compact was asked to supply a cylinder with the same bore and stroke but shave valuable millimeters off of the installation space. The machine featured 4 test regions with each region consisting of 16 cylinders working in pairs to press and secure each board into a test socket.

Project Solution

A standard inch series S158x1 cylinder was smaller than the competition and immediately solved the problem. To maximize space and ease of production assembly, Compact created a cylinder manifold featuring (8) cylinders in-line. Each cylinder section has twin switch rails to accommodate flush mount position sensors. Special undersized ports and special mounting holes were included to install the manifold and mount other devices to the manifold. Bottom boring of the manifold was utilized to add the switch magnets to avoid an increase in frame length.

Customer Benefit

The customer's problem was solved, and they launched their product on time.

