



## Cylinder Completes Semiconductor Test Equipment

*Space-efficient model takes place of larger competitor product*

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### Product Overview

We were contacted by an OEM who manufactures equipment to test PC boards, silicon wafers and completed chip packages. They had a new machine in design but had already used a competitor's 40mm x 25mm product on initial mockups. Once everything was together, it became apparent they just did not have enough room. We were asked if we could supply a cylinder that would have the same bore and stroke but would shave valuable millimeters off what they had. The application featured 4 test regions on each machine, each region consisting of 16 cylinders working in pairs to press and secure each board into a test socket.



### Product Solution

Our standard inch series S158x1 was smaller than the competition to immediately solve his problem. To maximize space efficiency and ease of assembly for production, we created a cylinder manifold featuring (8) 158x1 cylinders in-line. The manifold contained twin switch rails at each cylinder position to accommodate our flush mount, 4mm round sensors, as well as special undersized ports and an assortment of special mounting holes to install the manifold and mount other devices to the manifold. Bottom boring of the manifold was utilized to add the switch magnets without any increase to frame length from a non-magnetic model.

### Application Opportunity

The customer is extremely happy with the solution, and projects the machine will sell in the neighborhood of 50-75 units per year. With each machine consisting of eight of these manifolds at a cost of \$500 each and 64 switches total, this projects to be significant new piece of business for Compact, and for our distributor who also stands to gain the valve business now that the original competitor has been vanquished.

