The Application
The SOR® 107 differential pressure switch is designed to sense DP pressures from 0 to 40” w.c.d. This switch requires highly accurate and sensitive devices to be calibrated properly; this was a manual process. In an effort to speed up the process but maintain quality and accurate adjustment, an automated test stand was constructed.

The Solution
An SOR manufacturing engineer designed a unique calibration stand that incorporates two SOR Mini-Hermet transmitters. The Mini-Hermet transmitters control and report the pressures applied to both the high- and low-side ports of each individual differential switch. (See drawing below.)

The SOR Mini-Hermet transmitter was found to be durable in the production shop environment and rugged enough for the heavy pressure cycling required to test the differential switches. The Mini-Hermet transmitter proves to be more than just a sensor for a 4-20Ma signal out; it provides for unique system adjustments.

The Results
This test stand is the heart of reducing calibration costs to a product that competes with low-cost competitors. Reliable and accurate pressure inputs are critical to test stand performance. A transmitter must be durable for the test stand to remain up and running so product can be shipped.