

Fluke 719 Pressure Calibrator tests save time and money

Reactions from early users of the new Fluke 719 Pressure Calibrator are positive on many counts. The unit has an electric pump activated by simply pressing a button with your thumb. No fumbling around with an external or built-in manual pump. One-handed calibration of pressure sensing and pressure controlling devices.

What's news is the time-saving test it enables.

Instrument technicians at a refinery in the state of Washington estimate that the Fluke 719 saves them significant time in calibrating pressure switches and valves. To calibrate pressure switches, they previously used an external pump equipped with a gauge along with a meter to measure ohms or to detect continuity. This kind of operation requires the technician or, better, two technicians, to view the gauge and the meter simultaneously.

By contrast, the Fluke 719 has a built-in switch-test function that verifies and captures a switch's set, reset, and deadband values, while displaying both pressure and milliamps (mA).

Some calibration experts estimate that the average time saved in calibrating a pressure switch using the Fluke 719 versus an external pump, pressure gauge, and meter averages about 12 minutes for setup and six minutes for technicians to calibrate the switch. If plant technicians calibrate 20 switches a month, that's a full eight-hour day saved that they could spend on other tasks. Or, \$600 in terms of salary costs.

Other benefits

Three other aspects of the tool are opening up new efficiency opportunities.

First, the Fluke 719 Pressure Calibrator boasts total measurement uncertainty of 0.025 percent for pressure. That high level of accuracy means that instrument technicians can use this handheld to calibrate highly accurate pressure devices, including reference class pressure transmitters for which other handheld instruments lack the required precision.

Second, the 719 has a built-in 24 V loop supply with simultaneous mA measurement that can independently power a transmitter during a test. That allows you to calibrate transmitters without using the process loop.

Having a fully functional 4 mA to 20 mA source on hand with 0.015 % accuracy also eliminates the need to use a different tool for troubleshooting 4 mA to 20 mA I/O. Similarly, because it can simultaneously serve as a pressure tester and an mA source, the Fluke 719 is all you need to troubleshoot, commission and calibrate I/Ps (current-to-pressure devices), valves, and pressure gauges.

Third, clean-out ports are integral to the Fluke 719. If it becomes contaminated, it can be cleaned in the field with a cotton swab. Traditional instruments, if they become fouled, must be disassembled and cleaned or be sent to a service center for repairs. The average cost of such repairs is around \$800, and, of course, the tool is out of service while repairs take place.

