

## Free FCI Flow Calibration Laboratory Brochure

**ISO9001:2000 Certified, AS9000 Compliant, NIST Traceable Equipment**



### San Marcos, CA

Industrial process or plant engineers and OEM equipment design engineers with challenging flow measurement applications will find a new free brochure describing the services of Fluid Components International's state-of-the-art Flow Calibration Laboratory offers them a wide range of analytical services designed to achieve precision accuracy, superior repeatability and the highest reliability.

With over 40 years of flow instrumentation experience, FCI operates one of the industry's leading flow analysis and calibration laboratories. All laboratory equipment is National Institute of Standards (NIST) traceable, as well as certified to ISO 9001:2000 and AS9000 compliant. The laboratory also meets MIL-STD-45662A and ANSI/NCSL-Z-540 requirements.

FCI's Flow Calibration Laboratory provides gas flow calibration capabilities ranging as low as 0.001 SCFM (0.00017 NCMH) to ranges that exceed 5000 SCFM (8500 NCMH) and higher for line sizes in excess of 10 inches (250 mm). Flow calibrations for applications with temperature ranges from -100 to +1000F (-73 to +538C) and pressure ranges from 0 to 1000 psig (0 to 68 atmospheres) are commonly performed for many fluid services.

This advanced Flow Calibration Laboratory is utilized across the aerospace, aviation, process control and discrete manufacturing industries for precision thermal flow/level sensor design, manufacture, calibration, and research. The company's laboratory has supported a large number of leading-edge development programs, including preflight testing sensors for the F22 Raptor Fighter, the V-22 Osprey Helicopter, the Global Express Program and others.

Flow Calibration Laboratory services support a wide range of air, gas and liquid flow metering and flow switching applications in industrial processes and OEM equipment, as well as commercial aerospace and military aircraft, ground vehicles and naval ships. Specialized calibrations also can be performed on our separate Test Stands for both Liquid Fuel Flow and our Sanitary Flow.

FCI's Liquid Fuel Flow Stand provides calibrations that range from flow rates of 0.1 to 100GPM to 0.25% accuracy and -40° to 220°F with 0 to 125 psig pressure range.. The test section has ten feet of available length with multiple process connections and flexible hose configurations to support a wide variety of test set-ups. This stand is ideal for flow sensor calibration in aviation fuels (, JP5, JP8, Jet A, Stoddard Solvent) as well as coolants, lube and hydraulic fluids (ethylene glycol, PAO—synthetic oil).

FCI's Sanitary Flow Stand supports a wide range of clean and sanitary liquid applications (milk, orange juice, water based liquids and cleaning solutions) for the food/beverage, pharmaceutical and other industries with high purity requirements. This stand offers a flow range of 0.1 to 50 GPM, accuracy up to ±0.1% of reading, temperature range of 40° to 200°F and pressure range of 0 to 100 psig. The test section has standard pipe and tubing sizes as well as customer specified assemblies for many test set-up configurations.

From its earliest thermal mass flow sensor designs, FCI has focused closely for over 40 years on replicating field conditions in a controlled laboratory environment because the closer the replication, the higher the flow meter accuracy will be. Capabilities include a wide range of fluids, line sizes and process connections. This assures the highest installed accuracy and minimum metering uncertainty. Laboratory capabilities also include extensive automation and data collection capabilities, offering proprietary solutions that balance efficiency with traceability and reliability.

Fluid Components International is a global company committed to meeting the needs of its customers through innovative solutions to the most challenging requirements for sensing, measuring and controlling the flow and level of air, gases and liquids.