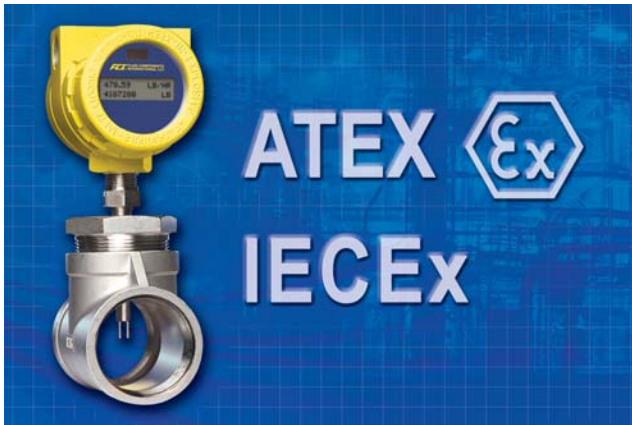


## Thermal Mass Flow Meter For Small Line Processes In Hazardous Areas Receives ATEX, IECEx Approvals

**Ideal For Co-Gen Electric Power Turbines, Food/Beverage Chillers,  
Heat-Treating Systems, Pharmaceuticals, Specialty Chemicals and More**



San Marcos, CA—Engineers in search of a highly accurate flow measurement solution for process gas, fuel gas, inert gas or waste gases as well as air in small line sizes will be pleased to learn that the advanced [ST75 Flow Meter](#) from [Fluid Components International](#) (FCI) is now ATEX and IECEx approved for safety in hazardous and potentially explosive plant environments.

The IEC prepares and publishes international standards for electrical, electronic and related technologies, while the ATEX directive specifies design criteria for flow meters and other electrically-powered instruments to help prevent explosions and fires when combustible gases are present. ATEX and IECEx approval for potentially explosive environments means that the ST75 Flow Meter is suitable for applications in hazardous plant areas in the European Community and elsewhere worldwide.

Designed for line sizes from 0.25 to 2.0 inches (6 to 51mm), the ST75 Flow Meter combines superior accuracy with a rich set of features. The ST75 provides three unique outputs: the mass flow rate, totalized flow and media temperature. It is ideal for applications in a wide range of industries including chemical, electric power, food/beverage, advanced materials, pharmaceuticals, semiconductor and more.

The ST75 includes media temperature compensation to ensure performance in rugged environments and features accuracy to  $\pm 2\%$  of reading with  $\pm 0.5\%$  repeatability. Its precision flow element has a no-moving parts design that employs platinum RTD sensors embedded in equal mass thermowells with microprocessor electronics calibrated to laboratory standards for a wide range of gases including: natural gas,

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methane, nitrogen CO<sub>2</sub>, argon, all inert gases, compressed air and more.

The ST75 Flow Meter is equally well suited for low flow and high flow operations. It operates over a wide flow range, from 0.01 to 559 SCFM (0.01 to 950 NCMH) depending on line size. For variable process conditions, the ST75 is factory preset to a wide turndown range at 10:1 to 100:1.

The ST75 is remote mountable, an ideal installation choice in equipment crowded plants or hazardous factory areas where explosive, flammable or toxic gases may be present near the transmitter's electronics. The remote mount transmitter, which includes a full digital display, can be mounted up to 50 feet (15 meters) away from its thermal mass flow sensor in the process piping and connected via two 0.50-inch FNPT cables. The ST75 provides an accurate, fast response and low-maintenance solution to small line size gas and air flow applications in hard to reach or hazardous locations.

The ST75 Flow Meter features fully scalable 4-20mA and 0-10V standard outputs. They are user assignable to flow rate and/or temperature and a 0-1kHz pulse output of total flow. The instrument can be ordered for input power with either 18 to 36 Vdc or 85 to 265 Vac, with or without a built-in LCD digital display.

The ST75 features thermal dispersion technology, providing direct-flow measurement for higher performance at a lower cost by eliminating the need for temperature sensors, flow computers, or other devices that are required with orifice plates, Venturis, Vortex shedding, and other meters. Its no-moving parts design ensures superior service life. There are no orifices or inlets to clog or foul, which significantly reduces scheduled maintenance and unplanned shut-downs.

The ST75 includes a rugged sensing element constructed with all welded 316 stainless steel and Hastelloy-C tips. It is enclosed in a rugged, all-metal, dust and water resistant NEMA Type 4X (IP66) rated package designed for hazardous area installations. ATEX/IEC approvals include: Zone 1, II 2 G Ex d IIC T6 . . . T3; II 2 D Ex tD A21, IP67 T90° . . . T300°.

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 flow and level of air, gases and liquids.