Fluid Components International – Breaking News

Precision Coriolis Flow Metering Now Possible For Harsh Fluids and Large Line Sizes.

FCI's New CM Series Flow Meters Are Ideal for Chemical, PetroChemical,
Oil/Gas, Pharmaceutical, Food & Beverage, Engine Test Stands, Pilot Plants

San Marcos, CA

With a breakthrough flow sensor design, the new CM Series Coriolis Flow Meters from Fluid Components International resets the industry benchmark for high accuracy flow measurement in larger line sizes up to 12 inches, flow rates to 80,000 lbs/min [2200 metric tons/hr] and for applications in harsh, corrosive fluids requiring exotic materials—all now achievable for the first time in a standard product line.

Many challenging process applications that could be improved or achieve cost savings with high accuracy Coriolis flow measurement have been long ignored because of line size and/or fluid limitations. Typical Coriolis Flow Meters have been limited to service in line sizes 6 inches or smaller and for use with benign fluids compatible with stainless steel. FCI's new CM Series Flow Meters overcomes these obstacles to expand the applications envelope for this technology.

"Large line sizes, high flow rates and wetted materials that have been impossible, unavailable or required extremely expensive, special products are now all achievable and more affordable with the standard products in FCI's CM Series", said Sam Kresch, FCI Product Line Manager. From clean fluids to the harshest of chemicals, liquids to gases, low flows to high flows, small to larger line sizes, high pressures and everything in between, there is an optimal CM Series solution available from FCI.

With the Models CMM, CMU and CMB Series Flow Meters, FCI expands Coriolis technology to serve a much broader range of applications in chemical, petrochemical, oil/gas, pharmaceutical, food and beverage, engine test stands, pilot plants and many more. Precision Coriolis flow measurement technology is here at last for the most challenging flow applications and toughest fluids.

From acids, juices to corrosives, argon to chlorine, hydrogen to ammonia, or even phosgene, the CM Series has a compatible choice of standard wetted parts. In addition to 316 stainless steel and Hastelloy, choices include Tantalum, Monel, Nickel, Titanium, Carbon Steel, Zirconium and more.

FCI designed the CM Series with a leading-edge Coriolis flow sensor and superior mechanical isolation to eliminate vibration effects, enhance measurement accuracy and minimize installation cost. The new CM flow sensor's thick pipe wall construction is well suited in high pressure applications as high as 13,000 psig (900 bar). In applications where there is a danger of the fluid solidifying into a no flow state or where heat is needed to maintain flow, the CM series employs a superior internal heat tubing array, which improves efficiency and saves space over the typical bulky external heat blanket technique commonly used by other devices. .

The CM Series is designed for mass flow measurement service in liquids and gases. The CM Series is available for line sizes from 1/8 to 12 inches (3 to 300 mm). Standard accuracy for the CM Series are ±0.1% to ±0.15% of rate with an optional 10-point calibration that can achieve 0.05% accuracy in the Model CMM Models CMM and CMU provide a wide standard temperature service range of -40 to 500ºF (-40 to 260ºC). Model CMU also provides a high-accuracy density measurement option.

The Model CT is a ruggedized, full-featured transmitter universally used with all CM sensors. Available as a blind transmitter or with an integral two-line LCD digital display, the transmitter is the electronics interface to the sensor and an array of analog and/or digital outputs. Standard outputs include dual 4-20mA, one standard with HART®, a frequency/pulse output of total flow, and a binary output of instrument status. Output options include Profibus-PA and a tamper-proof, custody transfer configuration that is sealed/certified, and prevents resetting of the internal totalizer. The CT can be mounted integral with the sensor or remote mounted up to 1000 feet (300 m) away.

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.