

## FCI's ST100 Flow Meter With VeriCal System Improves Performance and Reduces Maintenance

Ideal For Offshore Platforms & Other Hard To Access Production Environments



San Marcos, CA—The breakthrough ST100 Series Thermal Mass Flow Meter from Fluid Components International (FCI) is now available with FCI's VeriCal In-Situ Calibration Verification System, combining advanced measurement capability with the convenience of in-

situ calibration verification to lower operating costs in flare gas applications aboard offshore platforms, land-based oil/gas facilities and chemical plants. A demo will be available at OTC, in FCI Booth 11219, April 30-May 3.

FCI's advanced VeriCal™ In-Situ Calibration System and the ST100 Flow Meter Series are designed to comply with the US Minerals Management Service (MMS) mandate per final rule, 30 CFR Part 250, Subpart K, Section 250, stipulating that all domestic US offshore rigs processing more than an average of 2000 bopd must install flare/vent gas flow meters. These regulations are intended to protect the environment through the monitoring of greenhouse gases (GHG).

With the VeriCal In-Situ Calibration System, validating flow meter calibration is no longer labor intensive, costly or challenging. The system allows for the verification of flow meter calibration in minutes without removing the meter from the pipe or process and makes it easy to meet process validation more effectively and comply with environmental regulation requirements. In the past, flow meters had to endure the cost and hassle of being pulled from the process, then returned to the manufacturer or a calibration lab for testing and then shipped back for reinstallation.

The revolutionary ST100 Series Flow Meter sets a new industry benchmark in process and plant air/gas flow measurement instrumentation, offering the most feature-rich and function-rich electronics available today. The leading-edge ST100's superior flow sensing performance delivers unsurpassed adaptability and value to meet plant gas flow measurement applications for today and tomorrow.

Beyond continuously measuring, displaying and transmitting the industry's most extensive array of parameters, the ST100 is the first thermal mass flow meter with a migration path to tomorrow. Whether the need is for 4-20 mA analog, frequency/pulse,

alarm relays or digital bus communications such as HART, Fieldbus, Profibus or Modbus, the ST100 is the solution. Should a plant's needs change over time or an upgrade be desirable, the ST100 Flow Meter adapts as necessary with a plug-in card replacement that can be changed out by plant technicians in the field. That takes "never obsolete" to a whole new level in flow measurement instrumentation.

The ST100 Flow Meter's unique graphical, multivariable, backlit LCD display/readout brings new meaning to the term "process information". It provides the industry's most comprehensive information with continuous display of all process measurements and alarm status, and the ability to interrogate for service diagnostics. The user-friendly ST100 stores up to five unique calibration groups to accommodate broad flow ranges, differing mixtures of the same gas and multiple gases, and obtains up to 1000:1 turndown.

The ST100 is the first thermal flow meter to offer three different types of flow sensors to best match user applications. The fast-response FPC-style is a fast response features an integral flow conditioner and protective shroud optimized for compressed air and clean gas applications. For wet or dirty gases, or erratic flows, the unshrouded S-style facilitates easy cleaning and provides a smoothed response. The fast-response, general purpose FP-style features a protective shroud and is the sensor used with FCl's VeriCal in-situ calibration option.

The comprehensive ST100 Series is comprised of two core model families: ST and STP. ST meters measure both mass flow and temperature, and the exclusive STP family adds a third parameter, pressure, making the ST100 the world's first triple-variable thermal flow meter. Both families include single-point and dual-element models as configurations outfitted with FCI's exclusive in-situ calibration option, VeriCal.

The ST100 can be calibrated to measure virtually any process gas, including wet gas, mixed gases and dirty gases. The basic insertion style air/gas meter features a thermal flow sensing element that measures flow from 0.25 to 1000 SFPS (0.07 NMPS to 305 NMPS) with accuracy of  $\pm 0.75$  percent of reading,  $\pm 0.5$  percent of full scale.

Designed for rugged industrial processes and plants, ST100 Flow Meters include service up to 850°F (454°C) and are available with both integral and remote (up to 1000 feet [300 meters]) electronics versions. The ST100 is agency approved for hazardous environments, including the entire instrument, the transmitter and the rugged, NEMA 4X/IP67 rated enclosure. Instrument approvals (submitted and pending) include: FM and FMc: Class 1, Division 1, hazardous locations, Groups B, C, D, E, F, G; ATEX and IECEx: Zone 1, II 2 GD Ex d IIC T4.