

this month's topic **Measurement Equipment****Transmitters Feature a Remotely Mounted Housing Option**

The Cerabar M PMC51 and PMP51 transmitters are suitable for absolute and gauge pressure measurements in gas and liquid streams, as well as level, volume, and mass measurements in liquids. They are available with ceramic or metal diaphragm seals, which allow the sensors to function at temperatures up to

752°F and pressures up to 6,000 psi. A measurement accuracy of 0.15% is standard, and an accuracy of 0.075% is available as an option. Output options include 4–20 mA, 4–20 mA with HART, Profibus PA, and Foundation Fieldbus. The electronics housing may be mounted up to 33 ft from the sensor to avoid vibration problems or if space is limited.

Endress+Hauser
www.us.endress.com

Ultrasonic Controllers Ensure High Measurement Accuracy

The Sitrans LUT400 series ultrasonic controllers have 1-mm measurement accuracy, and are available in three models: the LUT420 level controller; the LUT430 level, pump, and flow controller; and the LUT440 high-accuracy open channel monitor (which also provides advanced level, volume, and pump controls). They have backlit

displays and can be programmed in less than one minute using the graphical quick start wizards. Their processing technology, called Sonic Intelligence, continuously evaluates and adjusts for noise level and changing process conditions. The controllers are suitable for wastewater treatment facilities, manufacturing processes, and industrial storage applications.

Siemens Industry Automation Div.
www.siemens.com/industryautomation

Dissolved Oxygen Probe Eliminates Calibration

The newest model of the LDO probe for dissolved oxygen testing does not require calibration or membrane replacement. The probe takes the temperature of the solution into account, and uses a luminescent sensor to measure the concentration of dissolved oxygen in solution. A blue LED excites molecules within the sensor; the higher the concentration of oxygen in a sample, the faster the luminescent molecules return to their normal state. Each sensor cap is calibrated in the factory prior to shipping.

Hach Co.
www.hach.com

Electromagnetic Flowmeter's Design Simplifies Operation

The ProcessMaster Wafer FEM300 Minimag electromagnetic flowmeter has a short response time due to the high excitation frequency of its transmitter. The universal design simplifies spare parts inventory and reduces inventory costs. Advanced data storage within the sensor eliminates the need to match sensor and transmitter in the



field. The flowmeter is available in sizes ranging from 1/10 in. through 4 in. with an ethylene tetrafluoroethylene (ETFE, *i.e.*, Tefzel) liner. Standard electrode choices include Hastelloy C, tantalum, and platinum/iridium. Factory-set parameters can be modified without opening the housing via the display screen and soft-key buttons.

ABB Measurement Products
www.abb.com/measurement

Rheometer Automates Measurement of Foam Properties

The Model 8500 pressurized foam rheometer uses a calibrated volume to calculate foam quality, shear rates, and shear stresses. The system's software allows the operator to automate the testing using protocols that define shear rates, test temperatures, and test segment durations. The system uses a pulse-free positive-displacement Quizix precision metering pump for injection of the base fluid and volume determination. Flow and shear rates are measured using a Coriolis mass flowmeter. The shear loop, mass flowmeter, pump, foam generator, and view window are contained within a convection oven for uniform temperature control.

Chandler Engineering
www.chandlereng.com