



What's New

INSTRUMENTATION

Accessory Measures pH with an iPod or iPhone



The PH-1 meter application and accessory for the iPhone or iPod measures pH, presents the data in an easy-to-read format, and supports email transmission of the readings. Users download the free PH-1 application from the Apple App Store, and connect the sensor and PH-1 meter to an iPod or iPhone to begin measurement. When used with a GPS-enabled device, the PH-1 meter creates a time, date, and location stamp. This is especially useful for environmental testing and monitoring. The PH-1 meter is designed for use with the company's Model S200C/BNC and Model S293/30K/BNC/2.5 combination pH, voltage, and temperature sensors. The sensors have a pH measurement range of 0–14 pH, a solution temperature measurement range of 0–100°C, and a voltage measurement range of –1,250 to +1,250 mV.

Sensorex

www.sensorex.com

FLUIDS AND SOLIDS HANDLING

Strainer May be Cleaned while in Service

The Fig 36HP stainless steel Y-type strainer is rated to ASME Class 600 standards, and is designed to protect downstream equipment from pipeline debris such as scale, rust, and weld

metal. Its large screen area creates a low pressure drop. The strainer can be fitted with a blowdown valve to drain and clean the screen while it is in service, which reduces system downtime. It is available in perforated or mesh designs, and is suitable for oil and petrochemical applications.

Spirax Sarco

www.spiraxsarco.com/us

Disc Geometry Improves Coupling's Reliability



The Dodge Disc coupling is suitable for pumping applications in the oil and gas industry. Its disc geometry minimizes stress during operation, which results in high torque ratings and long lifespan. The disc coupling has no relative movement between mating surfaces, and therefore does not need lubrication during operation. A large-hub option increases the maximum bore capacity in applications where the coupling size is determined by the shaft diameter rather than the torque requirement.

Baldor Electric Co.

www.baldor.com

Technology Produces Uniform Pastilles for Diverse Requirements

The Rotoform 4G effectively granulates liquid products through pastillation, and can be customized to handle most product requirements. The new model has pneumatic operation for higher yields, a safety hood that provides easy access for machine maintenance, and a steel belt cooler to facilitate the production of uniform

and dimensionally stable pastilles. The system can produce pastilles from fluids with viscosities of 1–50,000 mPa-s, at temperatures up to 320°C. The Rotoform 4G is suitable for oil and gas, chemical, pharmaceutical, and cosmetic applications. Systems are installed and maintained by the manufacturer's service department.

Sandvik Process Systems

www.processsystems.sandvik.com

Rotary Valves Boast Improved Energy Efficiency



The CI Series rotary valves are designed for use in applications that generate harsh or abrasive dusts. The outboard bearing design can handle pressure differentials up to 15 psig and temperatures up to 750°F. The eight-vane rotor improves process energy efficiency by minimizing pressure loss throughout the system. It has a two-vane inlet seal and a two-vane outlet seal to maintain pressure differentials. Optional variable-frequency drives can modulate drive speed and reduce power requirements based on the performance needs of the system. The rotary valves are available in cast iron or Type 304 or 316 stainless steel, and in sizes from 10 to 44 in. Adjustable rotor tips are offered in hardened steel, stainless steel, bronze, or polyurethane construction. Interior surface coating options include hard chrome, tungsten, and polytetrafluoroethylene (PTFE, *i.e.*, Teflon).

ACS Valves

www.acsvalves.com

Electrolyzer Systems Disinfect Water Onsite



Available in four capacities, Osec B-Pak tubular-cell electrolyzer systems generate a 0.8% sodium hypochlorite solution from water and salt for disinfecting process and drinking water (as well as swimming pool water). The largest model can produce up to 5 kg of chlorine per hour (120 kg/d). The production of sodium hypochlorite onsite eliminates the risks involved in transporting and storing chlorine gas or sodium hypochlorite solution. The Osec B-Pak systems are skid-mounted, and have fully automated control systems for enhanced operational safety. The electrolyzer cell has a robust, clear-acrylic enclosure for long service life.

Siemens Industry Automation Div.
www.siemens.com

Membrane Module Is Certified for Drinking Water Applications

The Q-Sep Model 2008 hollow-fiber ultrafiltration module is now available in a smaller size. It has a membrane surface area of 20.0 m², a total length of 1,015 mm, and a diameter of 225 mm. The self-encapsulated ultrafiltration module has a high pore density and uniform pore size distribution, with a low silt-density index (SDI). It is constructed of hydrophilic polyether sulfone (PES), and received the NSF/ANSI-61 certification for drink-

ing water system components. The membrane fibers are available with inner diameters of 0.8 mm for low-turbidity applications and 1.2 mm for high-turbidity applications.

QUA

www.quagroup.com

Polypropylene Tubing Serves as a Substitute for Fluoropolymer Tubing



A recent shortage of the raw materials necessary to produce fluoropolymer tubing has driven the need for a viable replacement that provides high heat resistance, high chemical resistance, and nonstick properties. Prolite polypropylene tubing offers chemical resistance approaching that of fluoropolymer, and it has low surface friction, excellent corrosion resistance, and high dielectric strength. Prolite is a lightweight material made from a compound that is NSF/ANSI-61 certified for drinking water applications. It is available with outer diameters ranging from 0.25 to 1.25 in. Custom options include nonstock sizes and added color.

NewAge Industries, Inc.

www.newageindustries.com

Evaporator Features Online Washing

The SmartMod modular evaporator system treats produced water for reuse in the extraction of heavy oil from oil



sands. The vertical-tube falling-film evaporator consumes 10% less power than other evaporators. The system has an online washing feature that allows for continuous distillate production at 70% capacity during washing. It has been designed to minimize installation costs and labor.

Aquatech

www.aquatech.com

Channel Grinder's Design Reduces Flow Bottlenecks

The redesigned Series 3 C3A channel grinder is able to handle 30% higher flowrates than the original Annihilator Series C3 channel grinder. The C3A has optimized high-flow side rails and a low-profile bottom housing, and allows for greater flexibility and management of channel and flow conditions. It features a one-



piece top plate with adapter cover, top stack tightening, shrouded seal design, and hardened couplings. The C3A can be retrofitted onto older grinder systems to use existing motor and drive adapters.

Moyno, Inc.

www.moyno.com

LABORATORY EQUIPMENT

PDMS Chip Interface Enhances Fluidic Connections

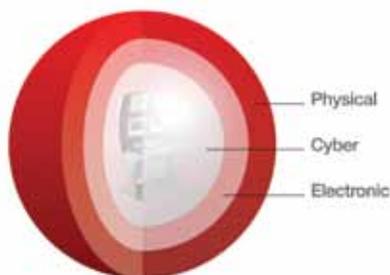
It is often difficult to make reliable fluidic connections to polydimethylsiloxane (PDMS) chips, which are commonly used for academic lab work. This chip interface allows researchers to create reliable, leakfree fluidic connections to such chips with outstanding sealing performance, which reduces experiment downtime due to leakages. Its design allows rapid changeover between different chip types, and accommodates a wide range of PDMS chip heights. The interface is suitable for use with the company's PDMS chip slide and linear four-way connector.

Dolomite

www.dolomite-microfluidics.com

ENGINEERING SERVICES

Program Guards Industrial Networks Against Cyber Threats



The Industrial IT Solutions group helps protect potentially vulnerable process industry facilities from cyber attacks. It specializes in the design, performance assessment, and protection of wireless instrument and supervisory control and data acquisition (SCADA) platforms, among other industrial networks. The group consists of a team of information technology (IT) experts and security-certified professionals who offer a range of vendor-neutral technology and services to assess, manage, and maintain cyber security measures. The group focuses on assessing a

plant's networks, remediating any potential security risks, managing the plant's network security with support and training, and maintaining the plant's security solutions through change management, performance monitoring, and monthly status reports.

Honeywell Process Solutions

www.honeywellprocess.com

ENVIRONMENTAL, HEALTH AND SAFETY

Industrial Radio Transmitter Alerts Plant Personnel of Process Changes



Quick Talk RQT is an industrial-grade radio transmitter that automatically alerts radio-equipped personnel when process conditions change. It monitors such parameters as liquid level, temperature, vibration, power interruption, and obstructions, among others, via inputs from up to four switches or sensors. When a change is detected, a prerecorded message alerts plant personnel of that specific sensor's variation. The Quick Talk RQT has a sealed polycarbonate enclosure with mounting flanges. It can be powered with 6 AA batteries or with an optional 110-V AC adapter, and is available with a 2-W or a 120-mW transmitter.

Ritron, Inc.

www.ritron.com

Flame Detector Has a Low False-Alarm Rate



The 3600-I Triple IR flame detector can detect fuel and gas fires at long distances with very few false alarms. It features a heated window to eliminate condensation and icing, a compact design, and low power requirements. The flame detector has an automatic and a manual built-in-test (BIT) to assure continued reliable operation. Output options include relays for alarm, fault, and auxiliary; 0.2 mA (stepped); HART protocol; and RS-485 (modbus compatible).

Sierra Monitor Corp.

www.sierramonitor.com

MATERIALS AND CHEMICALS

Adhesive Withstands Cryogenic Temperatures

The two-component EP30D-10 elastomer adhesive system offers high strength, flexibility, and abrasion resistance. It can be used in cryogenic applications and has a wide service temperature range of 4 K to 220°F. It features excellent electrical insulation properties and optical clarity, and is suitable for casting and encapsulation treatments. Once cured, it has a tensile strength of 1,500 psi and an elongation exceeding 150% at 75°F. The components of EP30D-10 are clear, have a 100:05 mix ratio by weight, and a long working life of 180 min at room temperature for 100 g mass. The adhesive bonds to metals, wood, concrete, glass, vulcanized rubbers, and many plastics, and has a 1-yr shelf life.

Master Bond

www.masterbond.com