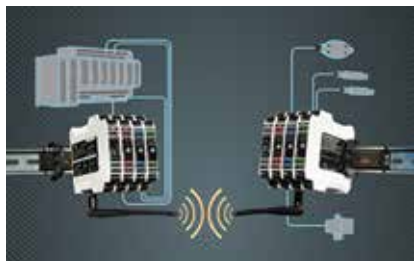




INSTRUMENTATION

Wireless I/O System Can Be Deployed Quickly



Wiring I/O systems long distances can be a costly and time-consuming job that includes trenching, pulling wires, and obtaining permits. This bidirectional wireless I/O system eliminates the months of work and complications of running wires. It can be installed within a few hours and requires no software configuration. A discrete module with four inputs and outputs and an analog module with two inputs and outputs are available. The radio modules, which have a range of up to 4 miles, have several antenna options. Each system can accommodate up to 16 module pairs. The conformal coated system can operate in temperatures ranging from -40°C to 85°C .

ProSoft Technology
www.psft.com

MATERIALS AND CHEMICALS

Coating Cures Under Water

KALCOAT 560 is a 100%-solids, high-build epoxy coating made of a blend of liquid epoxy polymer and aliphatic polyamine curing agents. It displaces water from wet surfaces to create a permanent bond, making it suitable for use as an anticorrosive coating, repair compound, fairing compound, or encapsulating coating in applications that are exposed to air or under water. For enhanced safety and technical performance, the formulation contains no solvents, and it incorporates Kevlar micro-

fibers for reinforcement and viscosity management. Other features include surface-tolerant bonding, fast curing, high build, and a low coefficient of friction.

Kalenborn Abresist Corp.
www.abresist.com

Plastic Is Suitable for Wearable Medical Devices



Makroblend M525 polycarbonate/polyester provides a high level of chemical resistance against body lotions and other compounds, and it meets regulatory requirements for biocompatibility. This plastic grade exhibits toughness, moldability, and dimensional stability, and it can be matched to a wide variety of colors to satisfy design criteria. It is suitable for devices that include molded-in windows or tubes. The material is compatible with standard assembly methods, such as ultrasonic welding and adhesive bonding.

Bayer
www.bayer.com

FLUIDS AND SOLIDS HANDLING

Hydrogen Generator Has a Small Footprint

HYDROPRIME compact hydrogen generators feature a design based on steam-methane reforming. These efficient, easy-to-install, compact plants are an alternative to truck-delivered liquid hydrogen, electrolytic plants, and conventional steam-methane reforming plants. They have a capac-



ity of 0.15–0.90 million std. ft^3/day ($165 \text{ N-m}^3/\text{hr}$ to $1,000 \text{ N-m}^3/\text{hr}$) and produce ultra-high-purity (99.999+%) hydrogen at 200 psi (13.8 bar), which in most cases reduces the need for product compression. The plants are fully automatic with fail-safe controls, enabling remote, unattended startup, operation, and monitoring. Facilities will benefit from the modular open-skid design and small footprint, as well as the safe and environmentally friendly performance.

The Linde Group
www.linde.com

Liquid Level Switches Use Tuning-Fork Technology



The design of the Liquiphant FTL31 and FTL33 liquid-level switches is based on vibrating tuning-fork technology. A piezoelectric drive causes

New Products

the tuning fork to vibrate at its resonance frequency. When the tuning fork is immersed in a liquid, its frequency changes relative to the density of the surrounding media. Foam formation, changing conductivity, and density do not affect the sensors' function. They are suitable replacements for float switches, as well as conductive, capacitance, and optical sensors. FTL31 is designed for the chemical, oil, and gas industries, while FTL33 is suited for use in the food and beverage and pharmaceutical industries. FTL31 can perform overflow prevention or pump dry-run protection in cleaning and filter systems, as well as in cooling and lubrication vessels at process temperatures up to 302°F and pressures up to 580 psi. FTL33 is designed for use in storage tanks, mixing vessels, and pipes with stringent internal and external hygiene requirements.

Endress+Hauser
www.us.endress.com

Sight Flow Indicators Shorten Cleaning Cycles



The Hy-Sight or Hy-Sight Full View flow indicators can shorten a facility's cleaning cycles while maximizing the visibility of flow in sterile or hygienic processes, such as pharmaceutical, biotechnology, cosmetics, biofuels, food and beverage, and chemical processing applications. Both highly cleanable styles feature precision-bore borosilicate glass with flame-polished ends that improve surface finish and sealability. The transition

between the tube bore, O-ring, and glass is said to be the smallest of any hygienic sight flow indicators on the market, and therefore easiest to clean. Both options surpass clean-in-place (CIP) and sterilize-in-place (SIP) requirements. Head material options include Type 316L stainless steel, Hastelloy C22, Hastelloy C276, and AL6XN. The Hy-Sight Full View model provides a 360-deg. view of process conditions.

Clark-Reliance Corp.
www.clark-reliance.com

Pneumatic Lift Makes Screen Changes Easy



With the QuickChange PT (QCPT) pneumatically powered lift system, one technician can change the screen in a round separator simply by flipping a switch. The lift features two air cylinders that are self-contained within towers mounted independently on each side of the unit. The ends of the cylinder rods move up from the towers to engage a bracket on the cover or frame and lift the frame stack. Design and safety features include a motor startup interlock, cylinders that raise and lower slowly, and an internally adjustable pressure regulator. QCPT has a small footprint and is available in carbon and stainless steel for 48-in. and 60-in. separators.

SWECO
www.sweco.com

ENGINEERING SERVICES

Workshop Teaches Failure Reduction and Proactive Maintenance Strategies



MRO Workshops are appropriate for industrial maintenance professionals who want to eliminate mechanical failures and reduce redundant maintenance practices. This customizable, in-plant training program aims to eliminate plant inefficiencies to improve profitability. Reliability and maintenance engineers, managers, supervisors, and technicians can learn new ways to trim maintenance costs and increase the reliability of equipment. Before the MRO Workshop, plant maintenance professionals and the training provider's technical representatives conduct a plant survey to assess current preventive maintenance programs and identify any ongoing challenges or problems that hinder production. The representatives identify ways to increase quality and productivity, minimize downtime and leakage, enhance safety, extend equipment life, simplify maintenance tasks, and eliminate maintenance redundancy. During the workshop, trainees learn mechanical basics and failure fundamentals, as well as how to identify time-saving opportunities, energy cost reduction methods, and safety and reliability improvement techniques — all of which are based on learnings from the plant survey. Topics addressed in the workshop are customized based on the plant's specific maintenance needs.

Henkel Corp.
www.henkelna.com