



## What's **New**

### **Pilot Plant Metering Pumps Provide Drift-Free Control**

These valveless ceramic pumps have sapphire-hard internal components that eliminate the accuracy drift typical of pumping systems that rely on valves and elastomers to move fluid through the pump. The pumps' design eliminates the need for check valves, which can clog, leak, or fail over time. This results in drift-free fluid control that will hold an accuracy of 1% or better for millions of cycles. Flowrates can be easily controlled either mechanically or electronically via standard industrial control protocols. Pump models are available for flowrates as low as 5 mL per stroke to as high as 4 L/min continuous metering.



**Fluid Metering Inc.**

[www.fmipump.com](http://www.fmipump.com)

**Booth 723**

### **Coating is Corrosion Resistant**



This DuPont Teflon polytetrafluoroethylene (PTFE) industrial coating is water-based, has a low volatile organic compound (VOC) content, and in salt-spray tests provided corrosion resistance for up to 3,000 hours. Corrosion resistance can be enhanced further with primers and substrate pretreatments; even without pretreatment, the coating provides excellent corrosion resistance on aluminum and

stainless steel substrates. The coating is specifically engineered for offshore, chemical processing, and water treatment applications. It can be applied in thicknesses of 1–4.5 mm, and with a curing temperature of 450°F, it has a short bake time. It is offered in blue (857G-018) and red (857G-508); yellow and black varieties will be added in the near future. The coating is available for next-day shipment.

**Intech Services**

[www.intechservices.com](http://www.intechservices.com)

**Booth 743**

### **Fluoroelastomer Withstands Aggressive Applications**



Aflas 200P is a peroxide-curable FKM-type fluoroelastomer that can withstand aggressive oils containing antioxidants, solvents, ozone, acids, and bases. It is suitable for oil seals, shaft seals, O-rings, gaskets, and a variety of other parts and fittings. It can also be solvated and applied as a coating. Classified as a Type 4 FKM by ASTM standards (*i.e.*, composed of propylene, tetrafluoroethylene [TFE], and vinylidene fluoride [VDF]), Aflas 200P fluoroelastomer offers improved performance at cold temperatures.

**AGC Chemicals Americas, Inc.**

[www.agcchem.com](http://www.agcchem.com)

**Booth 451**

### **Flow Reactors Handle Complex Reactions**

Coflore flow reactors can run continuously and handle the most complex reactions without backmixing. The reactors employ patented mixing technology with free-moving agitators

within each reaction stage that promote mixing, while the reactor body is subjected to lateral shaking. Intense mixing is produced without the need for rotating shafts, mixing baffles, or mechanical seals. Centrifugal separation, which can occur when two phases are present, is also eliminated. When reactions are very complex, Coflore's ten agitated compartments allow users to add chemicals at precise moments to optimize the reaction. This helps the Coflore achieve much higher yields than traditional batch reactors.

**Sentinel Process Systems**

[www.sentinelprocess.com](http://www.sentinelprocess.com)

**Booth 236**

### **Dry Scroll Vacuum Pump Lowers Maintenance Requirements**



The nXDS dry scroll vacuum pump requires minimal maintenance because it does not need routine oil changes, which translates to less downtime. It also has a low environmental impact, which enables a plant to reduce its carbon footprint. The pump has tip seals that last up to five years and can be replaced in less than 10 minutes in the field with basic tools. Control modes include serial, USB, remote parallel, and analog, as well as manual operation. Full serial communications mode provides feedback about the state of the pump, which enables process optimization and routine maintenance scheduling. The pump is available in four sizes, with pumping speeds of 6–20 m<sup>3</sup>/h.

**Edwards**

[www.edwardsvacuum.com](http://www.edwardsvacuum.com)

**Booth 455**

## Magnetically Coupled Pump Sets Comply with Safety Standards



SAXMAG magnetically coupled pump sets ensure the transmission of torque without physical contact between the pump and the driver, which eliminates the need for a packing gland or mechanical seal and ensures leakfree operation. This also helps meet stringent standards for environmentally hazardous and explosive materials. SAXMAG units are available for both the V series internal-gear positive-displacement pumps in port sizes of 0.5–10 in., and the J series self-priming centrifugal pumps in port sizes of 1.5–12 in. The pump sets are capable of transmitting torques from 20 to 850 N-m and can withstand temperatures up to 200°C.

**Varisco**

[www.variscousa.com](http://www.variscousa.com)

**Booth 748**

## Granular Sludge-Bed Reactor System Treats Wastewater Streams



This external-circulation sludge bed (ECSB) is a high-flowrate granular sludge-bed reactor system that is suitable for treating industrial wastewater streams containing biodegradable material. The anaerobic treatment technology is robust and has no odor emis-

sion points, and it has low maintenance requirements. Its design incorporates highly efficient biogas-liquid-solids separators, which provide excellent biomass retention and operation at high organic loading rates. Biogas treatment and utilization technologies allow the biogas produced in the ECSB system to be used as a form of renewable energy to replace natural gas.

**ADI Systems, Inc.**

[www.adisystemsinc.com](http://www.adisystemsinc.com)

**Booth 449**

## Loading Arm Transfers Liquid Products to Tanker Cars



The Roman Seliger SGA loading arm is suitable for safe and easy transfer of liquid products to tanker cars, tanker trucks, and vessels. The arm supports a chemical transfer hose and allows for secure movement of the hose between its stowed position and the vehicle or vessel being loaded. The operator is not required to lift the hose, as the loading arm supports all the weight. Any type of hose, as well as dry breaks, breakaways, and special attachment couplings, can be used with the SGA loading arm.

**Husky Corp.**

[www.husky.com](http://www.husky.com)

**Booth 729**

## Instrument Determines Water or Volatiles Content of a Variety of Materials

The Computrac MAX 4000XL measures loss-on-drying to determine the water or volatiles content of materials ranging from paints and coatings, paper liquors, gypsum, and plastic

resins, to food products and pharmaceuticals. It has a touch-pad interface and an easy-to-use menu structure that allows users to input and work with unique testing parameters for individualized material analysis. Test data can be downloaded via a USB port or accessed remotely from workstations using web server software. The device has a sturdy aluminum chassis that permits placement on manufacturing floors and in laboratory settings.

**Arizona Instrument, LLC**

[www.azic.com](http://www.azic.com)

**Booth 427**

## Spring-Mounted Grading Sieve Is Now Available with a Stainless Steel Base



The Eco Separator can size, classify, or grade powders, and is able to separate both wet and dry materials. Available in six sizes ranging from 24 in. to 72 in., the grading sieve can be used in facilities of any size, from pilot plant or laboratory to full scale. Although it was previously only offered with a painted base, it is now available with a fully stainless steel base. This makes it suitable for industries where equipment is continuously washed down or where painted equipment is not permitted. Stainless steel construction provides increased durability so the unit can withstand aggressive or corrosive chemical environments.

**Russell Finex**

[www.russellfinex.com](http://www.russellfinex.com)

**Booth 224**