



Desuperheaters Enhance Thermal Energy Transfer

A range of desuperheaters designed to offer precise control and reduction of superheated steam temperature helps boost thermal energy transfer, the company says. The desuperheaters provide turndown from 3:1 to 50:1. Carbon steel, stainless steel or chrome moly shell material options withstand temperatures up to 1,094°F. In addition, spray-type, venturi, variable-area, and steam-atomizing desuperheaters can be custom made and designed to meet the exact process conditions. They also recover and recycle waste and residual heat, increasing process efficiency.

Spirax Sarco
800-883-4411
www.spiraxsarco.com



Spectrometer Features Smaller Footprint

The TDLS8000 tunable diode laser spectrometer can quickly make in-situ measurements of gas concentrations in various process conditions. Its laser module includes a newly developed reference cell board that improves the reliability of absorption peak detection, the company says. A large (7.5-

in.) LCD touchscreen display replaces the push-button interface used on preceding models, making setting parameters easier and more intuitive. The light source module containing the laser diode is fully sealed and damage resistant. The redesigned spectrometer is just three-quarters the size and weight of the previous model, allowing it to be installed in a greater variety of locations.

Yokogawa Corp. of America
800-888-6400
<http://yokogawa.com/us>



Top-Mount Positioner Diagnoses Valve Health

Research Control SRD991 valve positioner mounts directly to the top of a control valve with a linear potentiometer. A linear connection mitigates hysteresis between the positioner and actuator by feeding back the actual position of the valve actuator. This provides significantly improved flow control, the company claims. The SRD991 includes an LCD screen, protocols (HART, Profibus-PA and Foundation Fieldbus H1) and two levels of diagnostics. The positioner's device type manager (DTM) displays and configures all diagnostics features. The DTM also provides a complete health report of the valve with full configuration and diagnostics data. Simple installation and setup allow easy

upgrade of any bottom-loaded reverse-acting pneumatic positioner.

Badger Meter
877-243-1010
www.badgermeter.com



Level Switch Withstands Extreme Conditions

CleverLevel series has been expanded to include more product variants. The compact level switch based on frequency sweep technology now offers a cooling neck for high temperature applications, a long version for improved level detection in bulk media and a process connection compliant to U.S. and Far East standards. The LBFS product variants are maintenance-free and can endure long-term temperatures up to 200°C (variant-specific) for demanding and hygienic applications. Both 82-mm and 250-mm designs can be installed in tanks with thick layers of insulation as well as in cone-bottom kettles. They can be mounted vertically at the inside tank edge for fill level monitoring.

Baumer Ltd.
860-621-2121
www.baumer.com

Hybrid Mixer Handles Larger Capacities

The PDDM planetary mixer line includes larger working capacities — up to 750 gallons. The multi-agitator mixer features two planetary stirrer blades and two high-speed disperser shafts. Designed for highly viscous and highly filled applications, the hybrid planetary mixer/disperser can quickly incorporate large amounts of dry ingredients into thick or sticky liquid, and



apply intense shear to achieve a smooth, uniform consistency. The PDDM is rated for vacuum operation up to 29.5 in. Hg and includes a jacketed change-can vessel, sight/charge ports on the cover and an automated lift for raising and lowering the agitators.

Charles Ross & Son Company
800-243-7677
www.mixers.com

Sensor Assemblies Keep Operations Running

Cleanfit CPA875 and CPA871 sensor assemblies allow installation and removal of pH, ORP, oxygen and NIR sensors during operation, protecting both the process and operating personnel. The CPA875 reportedly is ideal for applications where sensors must be removed for cleaning, calibration



or maintenance on a regular basis, while the CPA871 sensor suits water/wastewater and chemical industry applications. Materials in contact with the process medium are all stainless steel, while seals can be EDPM/FMP or Viton/FFKM, depending on the application. The immersion tube, process connection and service chamber can

be stainless steel, titanium, Alloy C22, PEEK or PVDF.

Endress+Hauser
888-363-7377
www.us.endress.com

Flow Controller Reduces Air Loss

Available for system capacities from 250 to 18,000 scfm, the Kaeser Flow Controller (KFC) creates more-effective storage by accumulating compressed air in receivers and only delivering air that is needed for production. The KFC responds to fluctuating demand and actively maintains constant system pressure downstream. More-stable air pressure helps eliminate artificial demand



and substantially reduces air losses through leaks. Further, stored compressed air now can be used to satisfy air demand spikes without pressure drop at the point of use, resulting in higher production rates, reduced maintenance costs, and significant energy savings. The controller can be installed easily in new or existing systems without reconfiguring existing piping.

Kaeser Compressors, Inc.
877-586-2691
www.kaesernews.com/KFC

Transmitter Ignores Vapor and Air Movement

The Pulsar Model R96 non-contact radar transmitter reportedly provides accurate, reliable level control in process applications. Virtually unaffected by the presence of vapors or air movement within a vessel's free space, the two-wire, loop-powered, 6-GHz radar transmitter measures a variety of liquid media in process conditions

ranging from calm product surfaces and water-based media to turbulent surfaces and aggressive hydrocarbon media. The transmitter features a measurement range of 130 ft (40 m), advanced diagnostics with automatic waveform capture and data logging, and a device type manager with field configuration and troubleshooting capabilities.

Magnetrol International
630-723-6730
www.magnetrol.com



Fire Valves Work Automatically

In the event of a fire, these fire-safe, fusible link valves provide automatic closure without the need for an operator present. They are available in sizes from ¼ in.–4 in. for the ball valve series and 3 in.–24 in. for the butterfly valve series. All fusible links are FM approved and all valves are API fire-safe approved and available with flanged or NPT ends. They have a temperature range of 165°F–300°F. The valves come in stainless steel, carbon



steel and ductile iron for performance in heavy-duty hazardous locations. Valves also can be operated manually while engaged.

Valtorc International
866-825-8672
www.valtorc.com



Pressure Switches Increase Installation Options

A-Series type-316L stainless steel pressure switches now offer a greater selection of process and electrical connections. With the addition of male and female ½ NPT and 37° flare pressure fittings, both the watertight and explosion-proof versions can be installed in a wider variety of applications, the company reports. Additional electrical conduit fittings improve connection options while NACE-compliant piston seals round out compatibility with sour gas applications. With expanded pressure ranges, the A-Series switch now can control pressure up to 15,000 psi.

Ashcroft

203-385-0635
www.ashcroft.com

Valve Expands Measurement Modes

Roto-Disc airlock/double-dump valves are now able to feed and measure product into or out of pressure or vacuum

environments in four modes. Through the development of the Roto-Disc cycle timer and enhancements to its accumulator chambers, applications now have volumetric and gravimetric measuring capability, in addition to traditional temporal and manual control. Users can

switch between any mode almost instantaneously and then return to operation just as quickly, providing measurement flexibility. Load-cell mounts or level sensor ports, both located on the chamber according to the application requirements, support the feeding system. Gravimetric systems include



flexible connections on the assembly for accurate weight measurement.

Roto-Disc, Inc.

513-871-2600
www.rotodisc.com

Weight Processor Speeds Processing Time

The HI 6500-XP EtherNet/IP-enabled weight processor for extreme environments can process and output 300 updates per second of processed (stable)



weight. A/D conversion, weight processing and the communications port all update at 330 Hz, providing the PLC with the latest processed weight reading every 3 milliseconds. The system results in better product consistency and product yields while reducing processing time, waste time and materials, the company says. It is designed for applications such as batching, blending, filling, dispensing and check weighing where speed and accuracy are paramount to control and quality. A set-up wizard and Rockwell Automation Add-On Profile simplify installation and calibration.

Hardy Process Solutions

858-278-2900
www.hardysolutions.com

Analyzer Fine-Tunes Combustion Process

Using two sensors, the Endura AZ40 analyzer continuously monitors combustion waste gases to measure both excess air and unburned fuel. It provides an unburned fuel measurement in terms of carbon monoxide equivalent (COe). The COe reading supplements the net oxygen measurement to permit further trimming to boost combustion efficiency. The analyzer consists of a sensor assembly, probe with filter assembly, transmitter, and interconnecting cable.



The sensor assembly mounts to a duct or process wall, with the probe extending into the flue gas stream. Available in lengths up to 8+ ft (2.5 m) and suitable for temperatures to 3,000°F (1,650°C), the probe continuously draws in the sample for analysis.

ABB Inc.

800-435-7365
www.abb.com/measurement

Weighing Instrument Features Remote Operation

A new hardware platform with extensive communication capabilities enables the BLH Nobel G5 family of weighing instruments to increase speed and performance, and offer intuitive operation, easy calibration and advanced diagnostics, the company says. The instruments support a range of applications, including process weighing and control, force measurement, factory automation, high dynamic force measurement, and



high-speed batching/blending systems. A built-in Web server speeds setup and simplifies parameter changes, enabling remote operation from any PC or mobile device with a Web browser and Ethernet connection. Weight and status are instantly displayed alongside other parameters and diagnostics information via user-friendly operator interface.

Vishay Precision Group, Inc.

484-321-5300
www.blhnobel.com

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