



What's New

INSTRUMENTATION

Meters Measure Flow Independently of Temperature and Pressure



The Type 8007 and Type 8008 flowmeters operate based on the calorimetric principle of flow measurement to avoid the effects of temperature and pressure. This method of measurement involves no moving parts, thereby increasing reliability and also providing relatively high accuracy at low flowrates. The 8008 model is designed for pipe sizes up to 2 in. and flows up to 825 Nm³/hr. The 8007 flowmeter is compatible with pipe diameters ranging from 0.5 in. to 12 in. and has capacities ranging from 41 Nm³/hr to 44,030 Nm³/hr (for the 0.5-in. and 12-in. sizes, respectively). The instruments must be installed in an undisturbed gas stream to ensure accuracy.

Bürkert

www.burkert.com

Flowmeter Is Suited for Small Lines

The ST75 air/gas flowmeter measures fuel gas, process gas, inert gas, waste gas, and air in small lines with diameters ranging from 0.25 in. to 2.0 in. It helps to optimize the fuel-to-air ratio for burner/boiler control to reduce fuel costs, enhance operation, and protect the environment. The instrument provides outputs of mass flowrate,

totalized flow, and media temperature, with accuracy to $\pm 2\%$ of reading and $\pm 0.5\%$ repeatability over varying process temperatures. It is equally suited for low- and high-flow applications, over a range of 0.01 scfm to 559 scfm, depending on line size. A design with no moving parts helps to extend service life and reduce maintenance. This flowmeter is appropriate for hazardous factory areas and crowded plants where explosive, flammable, or toxic gases may be present near transmitting electronics.

Fluid Components International

www.fluidcomponents.com

FLUIDS AND SOLIDS HANDLING

Bulk Bag Filler Meets FDA Standards



This sanitary bulk bag filler is constructed of Type 316 stainless steel to meet U.S. Food and Drug Administration (FDA) requirements. It is equipped with an integral metal detector/separator that detects and removes any metal as it fills bags by weight. The filler also incorporates a fill-head height adjustment to accommodate all popular bag sizes; an inflatable cuff that forms a high-integrity seal to the bag inlet spout; a blower to remove bag creases prior to filling; load cells

for filling by weight; a vent port for dust-free air displacement during filling; pneumatically retractable bag hooks; and an automated vibratory deaeration/densification system to maximize capacity and stabilize the bag for storage and shipment. The unit is equipped with full-length forklifting tubes so it can be moved throughout a plant environment.

Flexicon Corp.

www.flexicon.com

Belt Conveyor Is Designed for Sanitary Applications



This sanitary belt conveyor is suitable for use with bulk tablets, capsules, softgels, and powders, as well as ingredients in regulated and over-the-counter pharmaceuticals and nutraceuticals. A positive-drive urethane (PDU) belt, stainless steel frame and components, open construction, and other sanitary features contribute to an easy-to-clean design that reduces labor, speeds changeover, increases uptime, and maximizes product safety. The conveyor is suitable for transporting ingredients to blending and mixing, in-process products on manufacturing lines, and finished products to packaging. Systems are available in dog-leg, cantilever, flat, and inclined configurations that can be placed on the floor, mounted on casters, or suspended. The belt can be designed with flat

surfaces or a variety of shaped flights and/or flexible sidewalls to contain the product during processing. A homogenous and seamless belt resists the fraying, delaminating, and bacterial growth associated with fabric belts and interlocking plastic belts. The modular conveyor accommodates throughputs ranging from less than 2,000 lb/hr to more than 60,000 lb/hr of product.

Symetix

www.symetix.com

Valve Handles Aggressive Fluids

The SKW (slurry knife water) valve is designed for use with abrasive or corrosive slurries, powders, or coarse substances in oil and gas, power, and wastewater treatment applications, among others. The full-bore valve has no flow restrictions, which allows streams with abrasive or corrosive fluids to move without compromising performance. The valve functions as a full-port fluid control device, which reduces the energy required for pumping during operation. It features a cast single-piece body that eliminates the potential for leaks from the body, as well as a versatile tower construction that accepts manual, electric, hydraulic, or pneumatic actuation.

Flowrox

www.flowrox.com

LABORATORY EQUIPMENT

Spectrophotometers

Handle Diverse Applications

V-700 Series spectrophotometers measure in the ultraviolet (UV), visible (VIS), and near-infrared (NIR) regions. They feature rugged and compact designs, high-speed scanning, and high-quality optical performance. The V-730 UV-VIS model is suitable for advanced biochemical and clinical lab applications, as well as routine functions such as spectrum scanning, kinetics studies, quantitative analysis, and colorimetric tests. Equipped

with a sensitive photomultiplier tube (PMT) detector, the V-750 UV-VIS spectrophotometer provides accurate measurements of low-concentration samples. The V-760 UV-VIS model includes a dual monochromator to minimize stray light and ensure more-precise measurements with a wide dynamic range (up to 8 absorbance units). The V-770 model has dual detectors for UV/VIS and NIR wavelengths for affordable and accurate NIR analysis. The V-780 is a specially configured UV-VIS-NIR spectrophotometer with a monochromator that automatically exchanges dual gratings appropriate for the UV/VIS and NIR regions; it offers enhanced sensitivity in the NIR region.

JASCO, Inc.

www.jascoinc.com

Lab Stand Height Is Easily Adjustable



The spring-loaded Model QB quick-action lab stand is supplied with the DV3T Extra rheometer and the DV2T Extra viscometer to simplify viscosity measurement. The stand can be positioned to a desired height by pressing the button located on the stand and sliding the apparatus up or

down. Quick adjustment enables faster sample changes and improves lab efficiency, the latter a benefit of particular interest to labs with multiple operators. The stand is also available as an option with the manufacturer's standard viscometers, and can be ordered individually to replace lab stands for other instruments.

Brookfield Engineering

www.brookfieldengineering.com

Liquid Dispersion Unit Analyzes Small Samples



The ability to measure small samples is crucial when sample availability prevents the use of larger amounts of material, such as during early-stage product development. The MasterSizer 3000 Hydro SV small-volume liquid dispersion unit offers reliable particle size measurement with only 6 mL of sample. Minimal sample and dispersant use reduces the development, purchase, and disposal costs associated with routine analysis. The unique cuvette design enables representative sample measurement across a wide range of particle sizes. A design focused on ease of use enables most users, even those experienced primarily with dry measurement techniques, to access the benefits of this wet dispersion instrument.

Malvern Instruments

www.malvern.com