



Product Digest

this month's topic **Bioprocessing Equipment**

Filter Dispenser Simplifies Membrane Handling



The Sentino filter dispenser provides a fast, ergonomic way to handle individual membranes. It aseptically dispenses one membrane disc with a single press on its soft-touch keypad. The dispenser's design ensures easy loading and minimizes process interruptions. It is able to hold 200 membrane filters, but is compact and portable for small and cramped workspaces. The membranes may be used in the company's Sentino Pump.

Pall Corp.

www.pall.com

Density Meter Offers Control for Bioprocessing Equipment



This suspended-solids density meter continuously monitors the concentration of industrial process slurries in bioprocessing equipment. It may be installed in pipelines and open-top tanks, and uses nonradioactive ultrasound to measure density. The non-intrusive sensor can measure slurries too concentrated for optical sensors, and handle solutions of any

color. It is also able to calculate the mass flowrate. The meter can help automate desludging pumps to achieve the preferred feed density for digesters, belt presses, and centrifuges.

Markland Specialty Engineering

www.sludgecontrols.com

Incubator System Provides Precise Control for Cell Culture



The Okolab Bold Line stage-top incubator system provides live-cell imaging and is suitable for longitudinal cell-culture studies. It features an easy-to-use touch-screen interface. The system precisely controls parameters such as temperature and humidity in order to create an environment that is as close as possible to the conditions within a living organism. The system is also able to control the concentration of CO₂ and O₂ in the chamber. An optional Smart Box is available to control and monitor system performance from any web-enabled device.

Warner Instruments

www.warnerinstruments.com

Dispenser Dissolves Wet Powders for Cell Culture

The Ytron ZC dispenser is designed to disperse extremely difficult and wet powders into a liquid stream in a single pass, which improves the production of solutions based on cell culture media. A significant vacuum in the dispenser's reactor housing eases powder incorporation. The vacuum draws powders from the hopper into

the reactor head, where the particles are subjected to mechanical shearing prior to addition to the liquid stream. The result is a homogeneous distribution of the powders without lumps and with minimal foaming. The improved dispersion and wetting of the powdered ingredients can reduce batch times to less than one hour.

Quadro Engineering Corp.

www.quadroytron.com

Prefilters Feature Innovative Nanofleece Technology



The Sartoguard NF prefilters combine high-performance polyethersulfone (PES) membranes and nanofleece technology. The prefilters provide enhanced clarification capabilities, even for fine contaminants. They have high holding capacities and can handle high flowrates. The ultrafine fleece structure has small fiber diameters of 120–150 nm. The prefilters provide downstream protection for more-expensive sterilizing-grade filters. They can be easily installed in existing filtration processes with PES final filters.

Sartorius Stedim Biotech

www.sartorius.com

CO₂ Sensor Complies with Hygienic Requirements



The InPro 5000i is suitable for continuous, real-time dissolved CO₂ measurement in bio-fermentation. The sensor is fully sterilizable and has European Hygienic Engineering and Design Group certifications for compliance with hygienic requirements. The sensor's membrane provides a barrier against volatile organic acids, which ensures accurate measurements. Modular design makes maintenance and

part replacement fast and convenient. The InPro 5000i is the latest member of the company's Intelligent Sensor Management (ISM) family of sensors and transmitters. ISM is a digital platform with predictive maintenance tools to monitor the InPro 5000i. ISM's electronic documentation capabilities provide full traceability of sensor calibration and maintenance for regulatory compliance.

Mettler-Toledo

www.mt.com

Bioreactor is Designed for Wastewater Treatment

The Aqua-EMBR enhanced membrane bioreactor consists of an activated-sludge, extended-aeration biological treatment process and an ultrafiltration (UF) membrane. The UF membrane is positioned outside the bioreactor tank, rather than submerged in the tank. Because no membrane components are submerged in the biological mixed liquor, the biological and membrane systems can be operated and optimized independently. The Aqua-EMBR has tight membrane pores ranging in size from 30 nm (nominal) to 50 nm (maxi-

mum), which produces high-quality effluent. The bioreactor is operator-friendly; should maintenance be required, membrane modules can be

removed without any contact with the biosludge.

Aquatech

www.aquatech.com

Onsite Tray Capacity Diagnostics Using TRACERCO FrothView™ Technology

A new dimension to tower scanning tray analysis

Patent pending TRACERCO FrothView™ technology is now being used to measure capacity of trays in separation towers. A combination of field data gathering improvements together with sophisticated density profile analysis allows instant reporting of tray froth height, expressed as % tray space. Extensive pilot plant studies have verified that TRACERCO FrothView™ corresponds well to the % flood of an operating tray. To learn more about our unique tray analysis contact a technical advisor in your area to schedule a presentation.

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