



Small-Scale Fluid Control

Product: Flipper 6650 solenoid valve
Applications: Analytical fluid dosing
Features: With a pitch of only 4.5 mm, the Flipper 6650 solenoid valve comes in 2/2- and 3/2-way versions that offer performance comparable to 10-mm and 16-mm valves. The media-separated valve is compact and fast-switching, optimized especially for reproducible and precise dosing of aggressive fluids. Because of its compact size, the valve requires smaller internal volume in the connecting plates, thus increasing efficiency of media use, which can significantly reduce costs.
Contact **Bürkert Fluid Control Systems**
www.burkert.com



Single-Use Tubing

Literature: One-Touch Fluid Path Assemblies brochure
Features: One-Touch single-use fluid path assemblies are highlighted in detail in a brochure from Meissner. It illustrates common process configurations that use the company's library of prequalified components. Additionally, fluid path assemblies are shown with attached capsule filters for filtration of volumes from 10 mL to >10,000 L. Data on gamma irradiation are also covered. One-Touch assemblies can be customized to end-user requirements and include dynamic combinations of connectivity, tubing, and other components to achieve the functionality necessary for process demands.
Contact **Meissner Filtration Products**
www.meissner.com



Cell Culture Development

Product: Telstar Hexacreen system
Applications: Cell culture screening
Features: Telstar's miniature bioreactor can enable 10–15 animal cell culture trials and experiments and handle six cultures at a time. These units offer change of medium, monitoring, and control facilities similar to laboratory reactors. They enable the collection of information on major culture variables such as temperature, dissolved oxygen and/or oxygen consumption, pH, optical density, and spectrum measurement in the visible range. The system simultaneously monitors growth (absorbance) and metabolism (indirectly from acidification/oxygen consumption).
Contact **Telstar**
www.telstar.eu

Clinical Development

Product: qPCR integration assay
Applications: Plasmid DNA integration
Features: When a plasmid construct is selected for clinical development, the FDA requires that a study be conducted to confirm that plasmid DNA integration is either absent or insignificant. A key factor in this determination is the limit of detection for the assay used. AltheaDx's qPCR integration assay measures ≥ 5 copies of plasmid DNA per microgram of genomic DNA. The sensitivity and specificity of this assay make it well suited to integration studies. The company's scientists will work closely with yours to design a signature assay customized to your specific needs.
Contact **AltheaDx**
www.altheadx.com/platforms/integration.php

Disposable Bioreactor

Product: Parallel Bioreactor System control and CellReady 3L
Applications: Benchtop cultures
Features: The Mobius CellReady 3L single-use bioreactor can be integrated into DASGIP's control system using its Parallel Bioreactor System concept. This combines familiar process control with the advantages of single-use technology. A disposable bioreactor eliminates the need to clean and autoclave. Operators can add monitoring and control units as their applications require, including mass-flow-controlled gas mixing, variable-speed controlled pumps, and monitoring of pH and dissolved oxygen. Advanced in-line measurements such as off-gas analysis or optical density monitoring are also possible.
Contact **DASGIP**
www.dasgip.com

Live Cell Measurement

Product: Futura biomass monitor
Applications: Upstream process development
Features: The Futura biomass monitor is a compact, cost-effective, on-line instrument for conventional, miniature, and disposable bioreactors. This instrument measures live cell concentrations using radio-frequency impedance. It is suitable for animal, yeast, fungi, plant, and bacterial cell cultures in suspension or attached to carriers. All processing power is contained in a compact housing (no bulky transmitter required). Flexible bus connectivity allows multiple units to be connected to a PC, bioreactor controller, and SCADA through a simple hub.
Contact **Aber Instruments Ltd.**
www.aberinstruments.com



Live Cell Analysis

Product: Cell-IQ system

Applications: Cell line development and optimization

Features: The Cell-IQ system used in universities and institutes across Europe and Asia is now available from The Automation Partnership for the United States and Canada. It consists of a cell culture incubator, microscope, light source, and high-resolution camera integrated to intelligent image analysis software. The system automatically changes in cell morphology and distribution without labels or dyes.

Contact **The Automation Partnership**
www.automationpartnership.com



Depth Filtration

Product: Supra AKS cartridges

Applications: Depth filtration

Features: Supra AKS cartridges are ready-to-use immobilized activated carbon filters that facilitate seamless scale-up from laboratory through to commercial bioprocessing. Pall offers nine optimized carbon-containing media grades (AKS series media) and four scalable formats for processing volumes from 1 L to >20,000 L. By streamlining adsorptive filtration processes to a single step, these filters reduce overall process time while increasing product yield.

Contact **Pall Corporation**
www.pall.com/carbon



Mobile Pilot Plant

Product: BioFlo 610 sterilizable-in-place (SIP) mobile pilot plant fermentor

Applications: Culture of bacteria, yeast, fungi, plants, algae, and insect cells

Features: New Brunswick Scientific's BioFlo 610 mobile pilot plant fermentor is compact and versatile. This modular system comes with built-in load cells and a choice of 65- or 125-L SIP vessels. It comes with a list of off-the-shelf options facilitating delivery and customization at any time before or after delivery of a unit. The mobile skid fits through most doorways, making it easy to move between laboratories in research, pilot plant, and CGMP environments.

Contact **New Brunswick Scientific**
www.nbsc.com

Cell Culture Synergy

Literature: Sartorius Stedim Biotech and Corning Incorporated combined catalog

Applications: Bioproduction

Features: Corning and Sartorius Stedim are leveraging their synergies to comarket a full range of cell culture products through a combined product catalog. This collaboration offers a range of cell culture laboratory products for basic research to full-scale production. The companies will serve the global cell culture community with platforms for scalable solutions for both attached cells and suspension cultures. The partners are exploring best options and approaches for future research and development (R&D) efforts and joint product development.

Contact **Sartorius Stedim**
www.sartorius-stedim.com

Sterile Connections

Product: PureWeld tubing

Applications: Sterile fluid management

Features: High-quality PureWeld tubes are designed specifically to produce connector-free fluid paths that are quick, easy, and secure. This tubing allows for completely secure welding and connector-free fluid paths assembled in minutes. Low internal spallation allows tubes to remain pristine and outlast other weldable tubing. Their purity and clarity make these tubes suitable for use in sanitary environments including cell media and fermentation, sterile filling and dispensing, high-purity water transfer, vaccine production, fluid transfer, and filtration.

Contact **Watson-Marlow**
www.watson-marlow.com

Materials Storage

Product: Norlake refrigerators

Applications: Refrigerated storage

Features: Norlake refrigeration equipment provides safe and secure storage for valuable samples and other laboratory products. This product line includes laboratory refrigerators and freezers, vaccine refrigerators, flammable materials storage, environmental chambers and stability testing, and blood storage refrigerators and freezers. The company's incubators provide refrigerated, heated, or CO₂ environments for biotechnology applications.

Contact **Tovatech LLC**
www.tovatech.com/norlake/incubators