

News

Microfluidics, division of MFIC

New Barrier Isolator Available for Microfluidizer

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NEW CONTAINMENT ISOLATOR NOW AVAILABLE FOR MICROFLUIDICS™ MICROFLUIDIZER® FLUID PROCESSORS

**Absolute Control Systems, Inc. Collaborates with Microfluidics to Contain
Toxic Submicron Particles and Droplets During High-Pressure Processing.**

Pharmaceutical and chemical manufacturers seeking to comply with OSHA 1910.119 regulations for processing highly hazardous chemicals can now breathe easier. Microfluidics, a division of MFIC Corporation (Newton, MA), has collaborated with Absolute Control Systems, Inc. (Golden, CO) to design a containment isolator for its stainless steel Microfluidizer fluid processors.

Microfluidizer processors use pressures up to 40,000 psi to process highly stable, immiscible liquid emulsions and solids in liquid suspensions. Using the highest shear rates available, the Microfluidizer uniformly reduces particles and droplets to submicron sizes in its patented, fixed-geometry interaction chamber.

While operating at high pressures, there is the potential for the Microfluidizer to release a fine spray of submicron particles or droplets into the air. The new, hermetically sealed, stainless steel containment isolator fully encloses the Microfluidizer's high-pressure processing area so it is safer for processing toxic or potent products.

The containment isolator features HEPA filtration for inlet and exhaust to prevent any released material from becoming airborne into the operator's breathing zone. Filters are placed in a housing that allows operators to exchange them without exposure to the toxic particles being trapped.

Other features include sealed-in glove ports in the window openings to allow for operator safety during routine servicing and maintenance of the Microfluidizer processor. The isolator also comes with flip-up doors that seal tightly during operation, yet offer full access to the Microfluidizer when the containment area is clean. Absolute Control Sys-

tems also integrates Microfluidizer processor's controls into the isolator, replacing gauge panels and adding fittings and drain components so the system can be washed down inside. Other available options include motor starter and service disconnect for installation; an in-place self-leak test based on pressure-to-K; and spray covers for HEPA filters during cleaning and pressure-to-K testing. Microfluidizer processors offer several steam-in-place sterility options and an Ultra-Clean-in-Place option that thoroughly flushes the processing areas between batches. The entire cleaning process requires no disassembly.

The containment isolators are available for all Microfluidizer processor models, which are guaranteed scalable from laboratory to production level. Factory testing is performed at Microfluidics and at Absolute Controls once the containment isolator and Microfluidizer are integrated to assure reliable performance.

For more information about Microfluidizer processors and the new containment isolators, contact Microfluidics, a division of MFIC Corporation at 800.370.5452; e-mail mixinginfo@mfics.com; or visit www.microfluidicscorp.com. Free laboratory testing is available upon request.