



Hosokawa Containment Flexible Compact Isolator Offers 0.0021 $\mu\text{g m}^3$ Containment Levels

On going development of Hosokawa Containment's Flexible Compact Isolator (FCI) means units are now offering certified nanogram containment level results based on independent assessment carried out as part of the factory acceptance testing when personal exposure levels of 0.0021 $\mu\text{g m}^3$, when expressed as 8hr TWA, were recorded.

Designed for low cost, plug and play operation these low cost isolators afford cost effective barrier containment solutions for companies undertaking scientific research, bio-technology or pharmaceutical development involving even the finest nano-particles.

Testing was undertaken to determine whether personal exposure to airborne particles of a high potency Active Pharmaceutical Ingredient (API) during transfer and milling operations within the isolator could be controlled to <1.0 $\mu\text{g m}^3$.



Using a less expensive and less hazardous surrogate powder, lactose, simulated operations testing was carried out in accordance with SMEPAC guidelines (Standardised Measurement for Equipment Particle Airborne Concentrations), with material transferred into and out of the isolator as well as undertaking a small scale milling exercise.

Testing was carried out using a rigid acrylic canopy Flexible Compact Isolator. An alternative with a disposable/flexible canopy for fitting to the stainless steel base, is available for customers seeking a single or short term use model. The ergonomic and flexible design means that the FCI can be easily upgraded as requirements change.

The basic bench mounted unit can be upgraded with additional features such as a free-standing base frame, on board air handling system, CIP system, HEPA filtration and rapid transfer ports, to allow it to be tailored to individual work station requirements. Several FCI units can be joined together into a multiple configuration to offer a cost effective alternative to a large bespoke static isolator, when investment or usage frequency precludes the purchase of such.