

## GROUNDBREAKING HIGH CONTAINMENT FILTRATION AND DRYING TECHNOLOGY

**Powder Systems Ltd (PSL) is now providing world leading high containment lab glass filtration and drying technology as part of their existing FilterBox range.**

The new GFD™ FilterBox (glass filter dryer containment system) offers a small-scale solution to PSL's larger FilterBox products. PSL FilterBox technology has been extensively developed and refined to provide an optimum solution that combines PSL's two core focuses 'Filtration and Drying' and 'High Containment'.

### FilterBox Technology

The FilterBox is revolutionary technology consisting of a small to large-scale agitated nutsche filter dryer (ANFD) or GFD being completely integrated within a PSL isolator, providing high containment when handling highly potent APIs and other highly active or cytotoxic compounds.

The FilterBox achieves containment to nanogram levels protecting both the product and the operator during operations including charging, sampling, filtration, drying and discharging as well as base opening and cleaning, filtration media inspection and changing. The cleaning procedure can be performed safely and thoroughly as the vessel base, filtration media and discharge plug can be easily accessed in a contained environment. Interconnecting nozzles and pipes, discharge plug assembly, etc can be dismantled without any containment breach for a contained cleaning and maintenance as well as of the base and plug o-rings.

The FilterBox provides a more compact design than traditional separate agitated nutsche filter dryer and containment products, reducing floor space requirement and impact on plant design. The FilterBox solution is easily scalable for laboratory to industrial production including 0.002 m<sup>2</sup> to 0.3m<sup>2</sup> ANFDs.



### The GFD Filterbox

The GFD Filterbox is part of the FilterBox family and can comprise 0.002m<sup>2</sup> to 0.05m<sup>2</sup> GFDs as part of PSL's MINI, LAB and MAXI LAB glass filter dryer range. The GFD itself, works on a vacuum, has a heated jacket for drying and a removable filtration basket for collection of the product. This miniature version of a PSL production size filter dryer allows process development during early stages and facilitates scale-up to commercial applications.

PSL has been established for 22 years and is an original pioneer of high containment systems with extensive experience providing advanced filtration and drying products. PSL's engineering department works in tandem with process experts to guarantee reliable, scalable and repeatable production of high quality contained filtration and drying solutions from laboratory to commercial applications.

