



Containment

STERILE

FPS *4* tech sy

why our

4 our values?



Experience

Over the years we grew as one of the largest manufacturers in micronization and containment equipment.

This growth is the results of our ability to listen and understand in depth your process and your needs.

Reliability

You can trust the advice and assistance our experts: serving you is our mantra.

4 our innovation?



Performance

Our performance is the satisfactions our customers have when running our systems at the highest level, day in, day out. We live for that.

Technology

The solutions we supply are driven by our relentless efforts to deeply understand the needs of our customers and their pharmaceutical environment.

Our numbers: **+1000** Installations **+40** Countries

stems

challenges are *y*our solutions

*y*our process



High Containment

Rigid isolator systems for sterile or HPAPI processing are fully integrated with the process to be protected. Well proven solutions are combined with innovative ones, maintaining safety as our first priority.

Micronization

Fluid energy mills are more and more adopted for size reduction of new or established molecules. Derived from optimized experience and specific energy calculation, our jet mills are cutting edge solutions for pharmaceutical needs.

*Hy*brid tech

Our processes can be combined together or with other machineries, giving end users the integration required for each specific application.

*y*our challenge



Flexibility

In a high quality and fast changing industry, we remain flexible during project execution, to respond to new requests from our customers.

Efficiency

Cost and time management are the paramount for projects management, allowing for fast project execution.

served **+250** Customers **+18** Years presence

Isolators for aseptic handling



For sterile applications we propose closed isolators or Restricted Access Barrier Systems.

A **sterile isolator** allows avoiding the use of sterile cleanrooms, reducing the sterile volume around the process. Turbulent or unidirectional airflows can be adopted for ventilation.

Containment systems for sterile applications are proposed in the form of closed isolators or Restricted Access Barrier Systems.

FPS covers the following applications:

- Sterility testing
- Aseptic filling lines
- Vessel charging of sterile products
- Dispensing
- Sterile milling and micronization
- Vessel discharge of sterile products.

Most applications include an integrated decontamination system (VPHP generator).

The **RABS** is the right choice for flexible and secure production in existing cleanrooms. A RABS can be designed as open or closed system (i.e. for toxic products), and can be active or passive. Each RABS is engineered and optimized according to the process requirements.

FPS offers:

- Active RABS, complete with HVAC and T/RH control
- Passive RABS, with control integration for process machine (filling line)

Retrofitting of existing units can be achieved in a relatively short period of time.

Sterile solutions





**Sterile
dispensing
Isolator**

RABS solution

ps discharge isolator



RABS for filling line



Isolator for sterile HPAPI



Sterile API production is possible whenever a sterile environment can be assured during all production steps. Full understanding and integration of all manufacturing steps is necessary to obtain the desired results. Isolation technology maintains the sterile environment around the process with minimal space requirements.

FPS design isolators for the following API manufacturing processes:

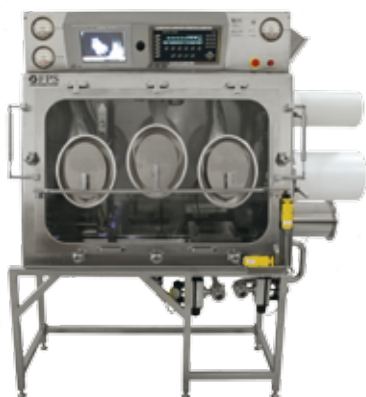
- Filtration and drying
- Filter dryer discharge
- Mechanical screening
- Milling
- Micronization

Hybrid tech by FPS

More and more HPAPIs are requested to be manufactured under sterile conditions. The requirements for sterile manufacturing and operator safety and protection can be met by custom designed isolators.

Sterile solutions

HPAPI Sterile Dispensing Isolator





Hybrid tech

Contained Sterile 6" spiral jet mill

PILOTMILL-6: jet mill integrated into isolator for processing sterile HPAPI

Filter Dryer Discharge Isolator





Containment | Milling | Micronization

FPS. Food and Pharma Systems S.r.l.

Headquarters

Via Vandelli, 20 - 22100 Como (CO) - Italy - Ph. +39 031 543429 - Fax +39 031 540885

Production and Test Facilities

Via Romagnoli, 3 - 29017 Fiorenzuola d'Arda (PC) - Italy - Ph. +39 0523 984930 - Fax +39 0523 240218

FPS America LLC:

3 Raymond Drive, Suite 105 - Glendale Ind. Park, Bldg 3 - Havertown, PA 19083 - Ph. +1 484-452-6655 - usa@fps-pharma.com

www.fps-pharma.com - info@fps-pharma.com