



ISOPAK-3



**Total
Containment
Technology for
Large Production Units**



SUPERJET MICRONISER

SuperJet Isopak-3 ...

SuperJet Isopak-3 are sanitary, USDA-accepted design, in line with Good Manufacturing Practice and the most demanding pharmaceutical specifications worldwide.

Isopak-3 is a typical machine for toxic, sterile and high active products in batches of 50-70 kgs.

Argon and nitrogen-inerted isolators are used with reactive chemicals and metal alloys that present risk of explosion or oxidation.

Produced since 1992, these machines are fully customized to product specification and were continuously improved in terms of versatility and compactness.

PROCESS EQUIPMENT

All process equipment are located in the safe, contained environment:

- SuperJet microniser with direct collection of the product from the grinding chamber, without risk of fiber contamination. It has a nozzle ring with optimized grinding angles, a horizontal venturi feeding system that avoids metal contamination and built-in, static classifying system that assures very narrow, particle size distribution
- Twin-shaft feeder, volumetric type, with concave-profile, self-cleaning,



SUPERJET MICRONISER, HALF-SUIT DETAIL

screws, able to break the agglomerates and to assure an accurate feeding of poor flowing products, for the whole batch.

- High-efficiency, dust separator combining inertial and static effects, with membrane filter cartridge, reverse-pulse, automatic cleaning and final, safety HEPA that exhausts breathing air quality to the atmosphere.

Process equipment are AISI316 stainless steel and hand polished with extrafine, mirror finish 320-360 grit, Ra 0.25-0.32µm. Super-mirror finish of contact parts, 400-600 grit Ra 0.16-0.25µm is also available.

TOTALLY SAFE ISOLATOR

The new concept of total containment technology is applied to Isopak-3 that features a modular design isolator. It holds all the process equipment and is kept negative or positive pressures, to avoid contamination of the product or of the environment.

Inside the isolator, the working areas are Class 1000 or better, with laminar flows and high-speed, air recirculation through HEPA filters to capture the ultra-fine dust released during the disassembling and cleaning operations.

Purified water showers, washing sinks, vacuum and ultrasonic cleaners and trapped drains allow perfect cleaning of all components, inside the contained environment, without risk of cross-contamination.

The dialogue with the external room is made through airlocks that are kept at differential pressure in respect to the working environment and to the room.

Clean-in-place, on and off-line steam sterilized equipment along with sterile, contained environments are used for highly sensitive products.

CAREFUL ERGONOMICS

The isolator's design is subject of a particular ergonomic study to assure that all the process equipment and air filtration systems can be serviced without breaking the containment.

The working areas are easily accessible through half-suits or gloves and feature service and stand-by lights that are built into the ceiling.



SUPERJET ISOPAK-3 FOR POWDER METALLURGY

The double-walled half-suit allows natural breathing and permits heat discharge. Breathing air supply, located inside the isolator, has independent air flow controls, fan and HEPA filters. By virtue of a pressure-equilibrium phenomenon, the half-suit is suspended by a cushion of air around the operator, thereby facilitating movement. Vision is very wide through the transparent helmet, welded on the half-suit.

Many process and auxiliary controls are duplicated inside the isolator, to allow operation from the half-suit.

Due to different product requirements, SuperJet Isopak-3 must be customized to every specification.

Complete powder processing and transfer lines are also available.



SUPERJET MICRONISER JM3 WITH INERTED, INDEPENDENT GLOVE-BOXES



Executive offices:
Via Pozzetto 26 Tel +41 91 6474849
CH-6854 STABIO 6474850
SWITZERLAND Fax +41 91 6474851

TECHNICAL CHARACTERISTICS

SuperJet Microniser	JM3
Nominal size	12 inch
	305 mm
Air/Inert gas @ 7bar	6.9 Nm ³ /min
	245 scfm
Supply (rec'd)	10 bar
	145 psi
Installed power	approx. 5 kW
Expected output	1.5-80 kg/hr

... what a high-tech microniser should be