



# B-B L A-A

## Intrinsic Safety for Potentially Explosive Products and Fine Dusts



# SUPERJET MICRONISER

## SuperJet Kompak-2C ...

SuperJet Kompak-2C micronisers are intrinsically safe and can process organic compounds that present high risk of ultra-fine dust explosion.

These products are class St2 or higher, according to dusts ignition and explosion classification. They typically develop, in case of explosion, about 9 bar with quick pressure increase and propagation speeds that limit the utilization of explosion-relief devices.

Potentially explosive powders can be micronised with intrinsically safe systems, able to resist dust explosion, such as SuperJet Kompak-2C series.

In production since 1989, this machine was repeatedly improved in terms of versatility and compactness, different construction versions being customized

Kompak-2C features sanitary, USDAaccepted design, in line with Good Manufacturing Practice worldwide.

It is designed for 10-bar pressure shock resistance and hydraulically tested at 16 bar, according to the most restrictive norms for pressure vessels.

Other design pressures and testing conditions up to 32-bar are used for special applications.

All components are inspected and certified by local authorities.



SUPERJET KOMPAK-2C , STANDARD VERSION



Despite the compactness of SuperJet design, pressure-resistant constructions result heavy, with components that are difficult to manage by hand.

The parts of the dust separator and the collection bin are handled by hoists, lifting columns and trolleys, with mention to PharmaLift that is IP65 class protection and sanitary design, in line with Good Manufacturing Practice.

SuperJet Kompak-2C is also used for non-pharmaceutical applications, being customized for construciton materials and finishing to product specifications.

The modular design allows interchangeability for different product hoppers, collecting bins and optional controls.

### **BASIC MACHINE**

All the construction versions feature the following equipment:

• 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, screws, able to break the agglomerates and to assure an accurate feeding of poor flowing products, for the whole batch. Speed is controlled by a stepless, mechanical variator.

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

• Venturi silencer with sight glass and PTFE wiper, actuated by hand

• Standard controls, integrated in the front panel, include process pressure regulators, pressure gages and differential gages to monitor the filters.

• Full stainless steel AISI316 (AISI316L) construction and modular design allow easy access to internal parts that are hand polished with extrafine, mirror finish 320-360 grit, Ra 0.25-0.32µm. Super-mirror finish of contact parts,



SUPERJET KOMPAK-2C WITH PHARMALIFT

400-600 grit Ra 0.16-0.25µm is also available. Materials, filters and roughness certificates are routinely supplied.

#### **O**PTIONS

SuperJet Kompak-2C can be fully customized with many options, the following being the most requested:

• high-precision, electronic pressure controls that monitor the microniser with proportional pressure regulators

• synoptic and LCD-alarm display with fault messages in plain english

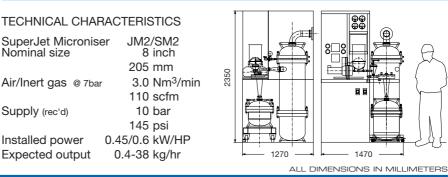
 electronic motor controller allowing stepless regulation of feed speeds across the specified range and features current limiting to prevent overloading

• batch validation equipment including 4-20mA pressure transducers and process recorder to document each event.

• vacuum compensation system that avoids environment contamination in case of blow-backs.



KOMPAK-2C, DETAIL OF COLLECTING BIN



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... what a high-tech microniser should be