

APT™

ADVANCED POWDER TECHNOLOGY
AND MICRONISATION

KOMPAK-3

Optimized
Efficiency for
Batch Processing



SUPERJET MICRONISER

SuperJet Kompak-3 ...

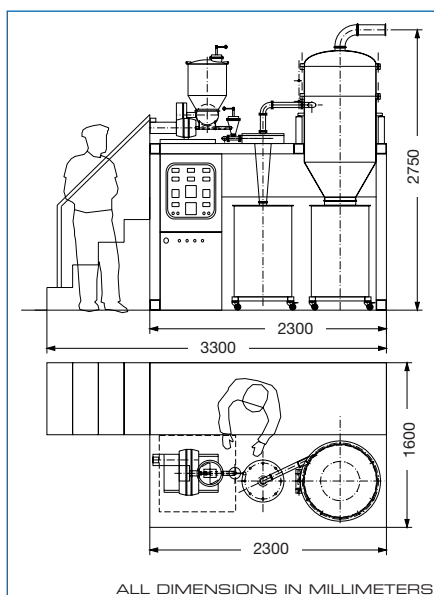
SuperJet microniser Kompak-3 is used for batches of at least 30-50 kgs and continuous operation, with collection of micronised product in drums or silos.

In production since 1988, this machine was repeatedly improved and presents a modular design that allows complete customization to the product specification and 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 cartridges, reverse-



pulse, 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 construction and simple, modular design allowing easy access to internal parts that are hand polished with extrafine, mirror finish 320-360 grit, Ra 0.25-0.32µm.

STANDARD VERSION

Standard Kompak-3 version is addressed to fine chemical and cosmetic industries. It employs the simplified, SM3 SuperJet microniser with fewer components. The grinding angle is determined for the range of specified products. Contact parts are AISI 304 stainless steel.

PHARMA VERSION

Kompak-3 Pharma versions is sanitary, USDA-accepted design and in line with Good Manufacturing Practice and the most demanding pharmaceutical specifications worldwide.

It is equipped with JM3 SuperJet microniser that has replaceable nozzle rings with optimized grinding angles for different products or range of products.

The dust separator is cylindrical and has sanitary clamp connections.

The process equipment is made of stainless steel AISI316(L). Super-mirror finish of contact parts, 400-600 grit Ra 0.16-0.25µm is also available. Materials, filters and roughness certificates are routinely supplied.

OPTIONS

- high-precision, electronic pressure controls that monitor the microniser with pneumatically-actuated pressure regulators, dimensioned for very quick response and steady operation
- electronic motor controller allowing stepless regulation of feed screw speeds across the specified range and features adjustable current limiting circuit to prevent overloading.
- batch validation equipment including



SUPERJET KOMPAK-3, CUSTOMIZED

4-20mA pressure transducers and process recorder that document each event and alarm.

- replaceable internal linings include PTFE, polyurethane, boron carbide and hard-metal alloys, etc.

All SuperJets can be customized according to the product specification.

Special versions such as closed-loop, nitrogen systems, independent of liquid gas storages and 10/16-bar pressure shock resistant machines are described in separate data sheets.

SuperJet Kompak-3 can be equipped with a process enclosure to reduce the noise and dust release to atmosphere, during the disassembling and cleaning.



SUPERJET MICRONISER WITH ENCLOSURE



Production SuperJet Micronisers	Nominal Size		Air/Inert Gas		Superheated Steam		Expected Output
	inch	mm	@7bar/100psi		@14bar/200°C		
			Nm ³ /min	scfm	kg/hr	lbs/hr	kg/hr
JM/SM-3	12	305	6.9	245	295	650	1.5-80
JM-4	16	405	12.8	450	495	1090	3.5-150
JM-5	20	505	17.9	630	765	1690	5.0-350
JM-6	24	610	25.7	910	990	2180	8.0-550
JM-7	30	760	39.5	1395	1650	3640	25-1200
JM-8	36	910	54.5	1925	2350	5180	40-2000
JM-9	42	1070	82.0	2895	3200	6950	90-3700

... what a high-tech microniser should be