



## **J-100, J-125 & J-150 Series**

### **Fluid jet micronizers designed for 'small production'**

[Jet mill systems](#) are the ideal choice for micronising pharmaceutical powders down to 1 micron in size.

Especially developed for pharmaceutical applications, the **J-100, J-125 & J-150** fluid jet micronizers are designed for small production applications. Based on the

intuitive and highly efficient jet milling technology developed by

**Tecnologica Meccanica**

(Italy), the

**J-100**

,

**J-125**

&

**J-150**

series of

[Fluid Jet Micronizers](#)

are capable of yielding extremely narrow tight particle size distribution (PSD) curves of  $d_{99} < 3\mu\text{m}$  (99% below  $3\mu\text{m}$ ) or even less depending on the nature of the product.

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### Profile

The

**J-100**

fluid jet micronizer has been designed on the basis of c

The

**J-100**

works at a constant temperature (endothermic) and ope

{xtype\_quote}Thanks to its modular design concept, the **J-100** can be upgraded, on request, to the **J-125** or

### Features

- Productivity from 0.50 to 30.00 kg/hour
- One single collecting point
- Static classifier in three different configurations
- Salability of the process to bigger micronizers
- Very low product loss, typical yields are 99% of batch size
- Elimination of blow-back phenomenon
- Limited caking of sticky powders
- Quick and easy assembling and disassembling of the system with a limited number of clamped compon
- Rapid cleaning and easy validation
- Simplicity of the whole unit

- Equipped with a skid-mounted *Process Gas Generator* for feeding treated gas to the jet mill
- Every equipment is manufactured in AISI type 316L (EN 1.4404) stainless steel or in Hastelloy mirror polished
- Special internal lining, Ptfе, Pur (Vulkollan), Ceramic, Titanium nitride, etc.

## Benefits

This series of micronizers *Technology developed to develop* to develop to satisfy the market request of equipment in capacity

The main advantage of these machines is their ability to work with an incredibly small quantity of product

This new family of micronizers has the lowest consumption of process gas per kg of production on the market

## Technical Specifications

### **Milling Chamber: J-100**

- Process gas at 7 bar=0.45 m<sup>3</sup>/min (15.9 CFM)
- Process gas at 12 bar=0.73 m<sup>3</sup>/min (25.8 CFM)
- Estimated capacity=from 0.50 to 7.50 kg/hour

### **Milling Chamber: J-125**

- Process gas at 7 bar=0.59 m<sup>3</sup>/min (20.9 CFM)
- Process gas at 12 bar=1.01 m<sup>3</sup>/min (35.7 CFM)
- Estimated capacity=from 0.50 to 15.00 kg/hour

### **Milling Chamber: J-150**

- Process gas at 7 bar=0.73 m<sup>3</sup>/min (25.8 CFM)
- Process gas at 12 bar=1.25 m<sup>3</sup>/min (44.2 CFM)
- Estimated capacity=from 0.50 to 30.00 kg/hour

## Options

Numerous configurations are available and can be offered to tailor our micronizers

The following options are already available:

- Volumetric or gravimetric pharma feeders
- Many different configurations for cyclone filter
- Sanitary rotary valve for the product collection

- In line sampling device
- Low Emission version with HEPA filter ( )
- Balance line
- **J-100** , **J-125** &
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- **J** -100 , **J-125** &
- **J-100** , **J-125** &
- CIP and SIP systems
- Explosion proof (ATEX) version
- Sterile version
- System fully automated by PLC/HMI
- Totally contained solution in isolator

**The Standard Pharma Version** components that can be shared by all the different milling chambers

- Upper and lower plates + central nozzles ring closed by three handles or by a single V-clamp
- Open manifold execution, FDA validated
- Stainless steel cyclone filter with polyester anti-static filter sleeve
- Fully automated pneumatic shaking system
- Supporting table with two pressure gauges, one thermometer and two ball valves
- Anti static swivel castors

**Gallery** {gallery}J100125150{/gallery}  
See it in Action! {flv}video |600|450|{/flv}

{/faq}

Find out more about [Micronization Technology](#) and its advantages to your applications below:

{faq inline/sliders} **What is Micronization Technology?**

**[Micronization Technology](#)** is a term that refers to the complex process of producing highly-refined powders

Generally, this is a complicated and rather expensive process with wide applications in various fields, particularly in the pharmaceutical industry.

**How Does Micronization Technology Work?**

Process powder is fed tangentially at subsonic speeds (approximately 50 m/s) into the flat cylindrical mill.

{flv}venturi |600|450|{/flv}

The micronizing effect occurs when the slower incoming powder particles and the faster particles in the

Watch the micronization effect in a jet mill below:

{flv}jetmill |600|450|{/flv}

This process works at a constant temperature (endothermic) and independently with the lowest consum

The

**Particle Size Distribution (PSD)**

is controlled by adjusting two m

- **PRESSURE** : The energy used to micronize; increased pressure incr
- **FEED RATE** : The concentration of product fed into the milling chamb

### **The Fluid Jet Micronizer Advantages**

- High-tech milling chamber geometry
- Nozzles designed for laminar jet streams and available with different grinding angles
- Optimized static classifier
- Elimination of the "caking" of sticky powders
- Narrow Gauss curve (particle size distribution)
- Lowest gas consumption on the market
- Elimination of the "blowback" phenomenon
- Optimised gas-solid separation and unique collecting point with yields close to 100%
- Balance and control of pressures within the whole micronisation system
- Reduction of contact surfaces – rapid cleaning and lower product loss
- Easy cleaning and validation operations
- Sterilizing system with hydrogen peroxide solution
- Inexpensive and easy to operate
- Capable of processing products with high solvent content (around 3000 ppm)
- Capable of processing sticky powders that do not flow well

**Find Your**

**Fluid Jet Micronizer Solution**

**Tecnologia Meccanica** has over 40 years experience with [Micronization Technology](#). It currently manufactures [Fluid Jet Micronizers](#)

Each size caters for a different requirement, depending on your application. If you are at all unsure or re

To browse each solution, Fluid Jet Mill, select your desired solution from the available

[J-20, J-25 & J-30 Series](#) The capacity is from 0.5 [More info](#) to 100.00 g/hour, suitable for lab

[J-40, J-50 & J-70 Series](#) The capacity is from 0.5 [More info](#) to 700 kg/hour, suitable for pilot, or small prod

[J-100, J-125 & J-150 Series](#) The capacity is from 0.5 [More info](#) to 3000 kg/hour, suitable for small produc

[J-200, J-300 & J-400 Series](#) The capacity is from 0.5 [More info](#) to 3500 kg/hour, suitable for medium to

[J-500, J-600, J-750 & J-900 Series](#) The capacity is from 0.5 [Contact Us](#) to 15000 kg/hour, suitable for large production appl

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#### **Download Brochure:**

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J-100 Data Sheet 

J-125 Data Sheet 

J-150 Data Sheet 

[J-100, J-125 & J-150 &nbsp;Product Sheet](#)



[J-100, J-125 & J-150 &nbsp;Presentation](#) 

[Fluid Jet Mill Technology](#)



[Benefits From the High-Tech Micronization Process](#) 

[Tests and Trials-Fluid Jet Micronizers](#)



[Check List Sheet-Fluid Jet Micronizers](#) 

[Screw Feeders](#) 

[PSD-Fluticasone Propionate](#) {/xtypo\_download}



**TECNOLOGIA**

Specializzata nello sviluppo e nella produzione di **MICRO**

Specialized in the development and manufacturing of **FLUID JET M**