J-200, J-300 & J-400 Series

Fluid jet micronizers designed for 'medium production'

Jet mill systems are the ideal choice for micronising pharmaceutical powders down to 1 micron in size.

{xtypo_info}Especially developed for pharmaceutical applications, the **J-200**, **J-300** & **J-400** fluid jet micronizers are designed for medium production.{/xtypo_info}
Based on the intuitive and highly efficient jet milling technology developed by **Tecnologica Meccanica** (Italy), the **J-200**, **J-300** & **J-400** series of **Fluid Jet Micronizers** are capable of yielding extremely narrow tight particle size distribution (PSD) curves of d100<5µm (100% below 5µm) and d99<3µm (99% below 3µm) or even less depending on the nature of the product.

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Profile

The **J-200** fluid jet micronizer has been designed on the basis of c

The **J-200** works at a constant temperature (endothermic) and ind

{xtypo_quote}Thanks to its modular design concept, the standard **J-200** can be upgraded, on request, to the **J-300** or

Features

•Productivity from 0.50 to 350.00 kg/hour
•One single collecting point bin, available in many different sizes
•Scalability 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
•Special internal lining, Ptfe, Pur (Vulkollan), Ceramic, Titanium nitride, etc.
•The **J-200** is manufactured in AISI type 316L (EN 1.4404) stainles

Benefits

While the **J-200** is capable of micronizing powder batches up to 350 **J-300** 00

Simplicity of the whole unit combined with very low product loss (typical yields of 99.5%of the batch size

The system is fully-automated by PLC/HMI and comes equipped with volumetric or gravimetric pharma f

Technical Specifications

Milling Chamber: J-200
- Process gas at 7 bar=1.70 m3/min (60.0 CFM)
- Process gas at 12 bar=2.74 m3/min (96.8 CFM)
- Estimated capacity=from 0.5 to 50.0 kg/hour

Milling Chamber: J-300
- Process gas at 7 bar=4.20 m3/min (148.3 CFM)
- Process gas at 12 bar=6.90 m3/min (243.7 CFM)
- Estimated capacity=from 5.0 to 200.0 kg/hour

Milling Chamber: J-400
- Process gas at 7 bar=7.00 m3/min (247.2 CFM)
- Process gas at 12 bar=12.00 m3/min (423.8 CFM)
- Estimated capacity=from 10.0 to 350.0 kg/hour

Options

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

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 **J-200-LE** filter ( )

•Balance line
• **J-200** , **J-300** &
• **J-200** , **J-300** &
•CIP and SIP systems
•Explosion proof (ATEX) version
•Sterile version
•Open version for clean room
•Totally closed, stand-alone version
•System fully automated by PLC/HMI

The Standard Pharma Version
• Open manifold execution, FDA validatible
•Upper and lower plates + central nozzles ring closed by four handles, or by a single V-clamp
•Twin screw volumetric feeder
•Manifold with automatic main valve, ball process valves, two pressure gauges, and one thermometer
•Cyclone filter with polyester anti-static filter sleeves, ending with a sanitary butterfly valve for product co
•Final filtering unit with pre-filter, semi absolute, and absolute Hepa filter (99.997% efficiency)
•Main control panel
•Simplified version based on the same Pharma concept can be customized for other applications:
- Cosmetics
- Fine chemicals
- Food
- Fillers

Gallery {gallery}J200300400{/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 pow

Generally, this is a complicated and rather expensive process with wide applications in various fields, pa

How Does Micronization Technology Work?

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

{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

- Enhanced hi-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, simply select your desired **Fluid Jet Mill** size from the available below:

J-20, J-25 & J-30 Series The capacity is from 0.5 kg/hour to 100.00 g/hour, suitable for la **More Info**

J-40, J-50 & J-70 Series The capacity is from 0.0 to 7.00 kg/hour, suitable for pilot, or small pro **More Info**

J-100, J-125 & J-150 Series The capacity is from 0.5 to 30.00 kg/hour, suitable for small produc **More Info**

J-200, J-300 & J-400 Series The capacity is from 0.5 to 350.00 kg/hour, suitable for medium to **More Info**

J-500, J-600, J-750 & J-900 Series The capacity is from 0.5 to 1500.00 kg/hour, suitable for large production appli **Contact Us**

{/faq}

Download Brochure:
{xtypo_download}
J-200 Data Sheet
J-300 Data Sheet
J-400 Data Sheet
J-200, J-300 & J-400 Product Sheet
J-200, J-300 & J-400 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}