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[J-40, J-50 & J-70 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.

{xtypo_info}Especially developed for pharmaceutical applications, the **J-40, J-50 & J-70** Fluid Jet Micronizers are designed for R & D and small production.{/xtypo_info}

Based on the intuitive and highly efficient jet milling technology developed by **Tecnologica Meccanica** (Italy), the **J-**

40

,
J-50

&
J-70

series of

Fluid Jet Micronizers

are capable of yielding extremely narrow tight particle size distribution (PSD) curves of $d_{100} < 5\mu\text{m}$ (100% below $5\mu\text{m}$) and $d_{99} < 3\mu\text{m}$ (99% below $3\mu\text{m}$) or even less depending on the nature of the product.

{faq inline/tabs}

Profile

The

J-40

fluid jet micronizer

has been designed on the basis

The

J-40

works at a constant temperature (endothermic) and independent of the product

{xtypo_quote}Thanks to its modular design concept, the **J-40** can be upgraded, on request, to the **J-50** or **J-70**{/xtypo_quote}

Features

- Productivity from 0.05 to 7.00 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 components
- 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, PTFE, PUR (Vulkollan), Ceramic, Titanium nitride, etc.

Benefits

Ability to micronize very small batches/samples from 50 g to small up to 7 kg/hour capacities with an extremely low cost of operation

Thanks to their modular design concept, these micronizers can be used for R&D as well as for small production

These compact and versatile units make micronization a much easier process with a low cost of operation

Technical Specifications

Milling Chamber: J-40

- Process gas at 7 bar=0.45 m³/min (15.9 CFM)
- Process gas at 12 bar=0.73 m³/min (25.8 CFM)
- Estimated capacity=from 0.05 to 2.00 kg/hour

Milling Chamber: J-50

- Process gas at 7 bar=0.45 m³/min (15.9 CFM)
- Process gas at 12 bar=0.73 m³/min (25.8 CFM)
- Estimated capacity=from 0.05 to 5.00 kg/hour

Milling Chamber: J-70

- Process gas at 7 bar=0.59 m³/min (20.9 CFM)
- Process gas at 12 bar=1.01 m³/min (35.7 CFM)
- Estimated capacity=from 0.25 to 7.00 kg/hour

Options

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

The following options are already available:

- Many different models of screw feeders
- Many different models of bag filters
- Automatic shaking system for filter sleeve
- Balance line

•	J-40	,	J-50	&
•	J-40	,	J-50	&
•	J-40	,	J-50	&
•	J-40	,	J-50	&
•	J-40	,	J-50	&

- Explosion proof (ATEX) version
- Sterile version
- Totally contained 'solution in a glove box'

The Standard Pharma Version:

- Modular components that can be shared by all the different milling chambers
- Open manifold execution, FDA validated
- Upper and lower plates + central nozzles ring closed by three handles, or by a single V-clamp
- From 1 lt to 5 lt product collecting bin, depending on the milling chamber
- Polyester anti-static filter sleeve in a stainless steel tube with cylindrical inspection glass
- Supporting table with two pressure gauges, one thermometer and two ball valves
- Manual shaking system
- Anti static swivel castors

Gallery

See it in Action!

{gallery}J405070{/gallery}

{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 mil

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

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

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 consump

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, [Fluid Jet Mic](#) select your desired size below the available

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

[J-40, J-50 & J-70 Series](#) The capacity is from 0.5 [More Info](#) to 7.00 kg/hour, suitable for pilot, or small prod

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


[J-200, J-300 & J-400 Series](#) The capacity is from 0.5 [More Info](#) to 50.00 kg/hour, suitable for medium to

[J-500, J-600, J-750 & J-900 Series](#) The capacity is from 0.5 [Contact Us](#) to 150.00 kg/hour, suitable for large production appl

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Download Brochure:










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J-40 Data Sheet 

J-50 Data Sheet 

J-70 Data Sheet 

[J-40, J-50 & J-70 &Product Sheet](#)

-  [J-40, J-50 & J-70 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](#)  [\[xtunc download\]](#)



TECNOLOGIA

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

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