



# SUPERFINE

POWER TO POWDER

Introducing the Vortex mill<sup>®</sup>  
Micronization, re-invented

- Easily micronize materials to **5 microns and less** in one pass
- Up to **1:800 milling ratio**, No pre-milling required
- No Venturi feeder, **no clogging**
- **Versatile**—from the hardest materials to the most delicate proteins

- Active Pharmaceutical ingredients, Inhalable drugs
- Proteins
- Herbal products
- Pigments
- Polymers
- Food additives, Nutrients



# SUPERFINE POWER TO POWDER

## Vortex mill—a new concept in micronization

Our technology is based on exposing the particles of the milled material to **rapid changes of air pressure**. Hence, the particles break along their natural dents, cavities or crystal defects. Particles do not collide with each other. The result is a **“clean cut” powder** that is not accompanied with compression, trauma or amorphization of crystal surface, - a **“soft process”**.

**No particle-particle collisions, no impact milling !**

## Superior performance—Power applied gently!

Superfine can micronize most materials to a powder **under 5 microns in one pass**.

It can handle absorbing energy materials such polymers and organics in **ambient temperature** or with minimum cooling.

With Superfine, **micronized particles are protected from heating or amorphization**.

## Lower Opex

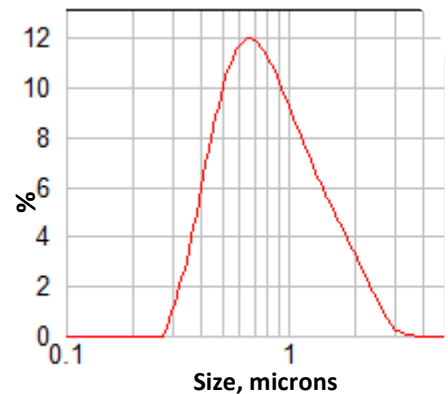
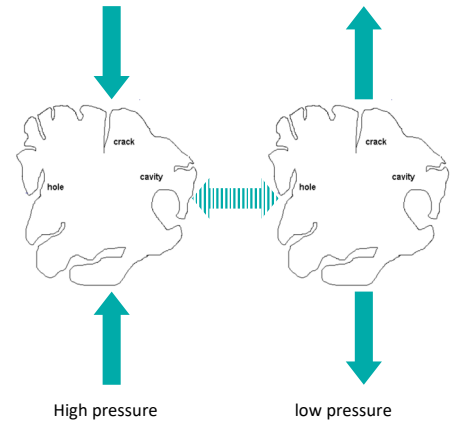
Your Opex lowers due to the fact that our technology have a **very high milling ratio**, up to 1:800. **No pre-milling. Particles of up to 3 mm can be fed.**

Air pressures of **less than 6 bars** are usually required.

**No multiple-millings** : less handling, higher yields.

Cryogenic milling is avoided in many cases.

Do you need to micronize materials that needs special care, or you are looking for a cost effective solution to tough micronization applications?



Contained demonstration unit

Biopharmax India Pvt. Ltd.  
Bavdhan, Pune

Contact us for Demonstration & Details  
Sheetal Kunjir Mob. +91 7887548008  
Email : [sheetal.kunjir@biopharmax.com](mailto:sheetal.kunjir@biopharmax.com)





**SUPERFINE**  
POWER TO POWDER

**A breath of fresh air**  
Creating the perfect powders for  
inhalation products





# SUPERFINE

## POWER TO POWDER

Micronization is the single most critical step for performance of inhaled powders

Superfine introduces the first micronizer designed especially for inhalation products

**Superfine strives in the challenging world of inhalable powders**

Superfine's Vortex micronizer "feels at home" at the 2-5 microns and will easily obtain the perfect PSD range

**Always single pass**

Superfine's process ensures a single pass through the micronizer. That means higher crystallinity, more efficient process and higher yield.

**Process guarantee**

Superfine provides full support for installation, process development and manufacturing. We offer guarantee for PSD and production rate.

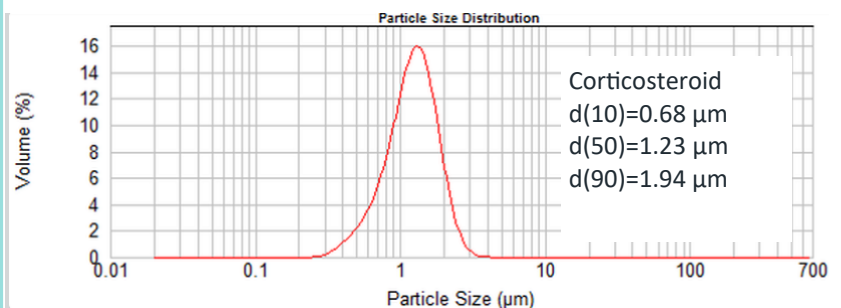
**Proven performance**

Superfine's Vortex micronizer is installed in commercial lines for Corticosteroids and other challenging API's

Do you need to micronize materials that need special care?

Are you are looking for a cost effective solution to tough micronization applications?

Contact us today for a free trial!



Biopharmax India Pvt. Ltd.

Bavdhan, Pune

Sheetal Kunjir

Mob. +91 7887548008

Email : [sheetal.kunjir@biopharmax.com](mailto:sheetal.kunjir@biopharmax.com)