

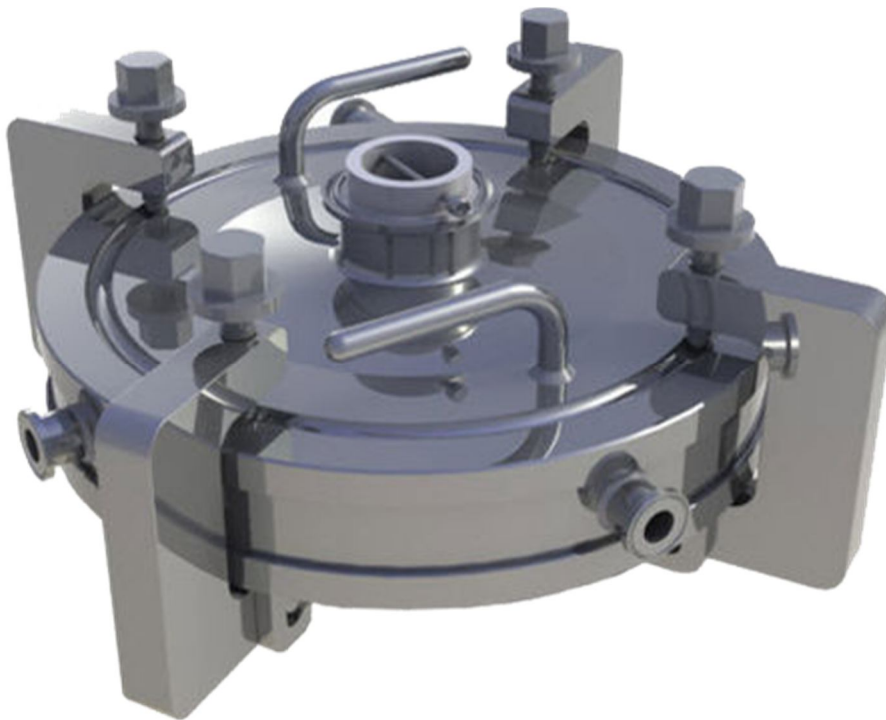
Jet Mill

Air jet Mill is shearing action grinding and collecting operations for achieving ultra-fine grinding upto 0.4 micron to 15 microns * depending upon the nature (Physical & Chemical Property) of the product. Air jet mill (also known as micronizer) is designed for grinding hygroscopic, heat sensitive and explosive materials to achieve consistent steep particle size distribution. Air Jet Mill allows greater control over the grinding parameters and product particle size distribution



Model Available :

- Pneumatic bag shaking model.
- Reverse pulse jet model.
- For isolator application.
- For containment application.



Working Principle

Jet Milling is a concept of feeding powder particles into a flat circular milling chamber and subjecting the same tangentially with pressurized air or nitrogen through a venturi. The Powder Particles are accelerated in a spiral movement inside the milling chamber by a number of angular holes in a ring and placed around the periphery of the chamber.

The heat-sensitive and low melting point materials are easily micronized. Micronizer takes place due to the collision between the incoming particles and the particles, which are already accelerated into the spiral path, The larger Particles of the product get retained at the periphery of the chamber by centrifugal force and the smaller particles exit with the exhaust air from the central portion of the chamber.

The material can be milled to an average particles size of 0.2 to 5 micron or coarse ground to 400 mesh depending upon characteristics of the product.

The milling action of the particle is because of the high velocity of air/gases instead of pins, jaws or hammers and because of this heat does not get generated during milling. The adiabatic expansion of compressed air takes place with the resultant cooling effect. The heat-sensitive and low melting point materials are micronized without use of freeze grinding methods.