

## **Air Jet Mill - AJM**

Fluidised bed opposed jets

### **Performance Driven**

Process Plants for : Paints, Resin,  
Minerals, Pigments & Agrochemicals.

An efficient industrial solution with opposed air jet micronizer for sharp top cut and narrow particle size distribution while maintaining low temperature for heat sensitive materials with aromas and aspect ratios.



## Applications:

This type of opposed air jet micronizers are suitable for milling and micronizing of a wide range of specialist materials in the chemical, herbicide, pesticide, metal powder, mineral and plastic industries.

When, the feed material is very hard or very fine or temperature sensitive having low melting points, when other types of

micronizers give-up and are not suitable then opposed air jet micronizers comes to rescue.

When purity of the product is high and is to be maintained free of contaminations, then too, the opposed air Jet micronizers are the only solution.

## Industry:

Dyes & Pigments, Pharma Products & Intermediates, Agro-chemicals Like Herbicides, Pesticides, Insecticides, Fine Organic/Inorganic Chemicals.

## Principle of operation:

In the opposed air jet micronizers, compressed air/gas is introduced and accelerated through accurately designed and manufactured nozzles, arranged radially opposite and submerged in the bed of material, to generate high attrition within the bed of material to reduce the particle size.

Thus, no foreign material comes in the contact of the material being processed and the expanding air/gas keeps the micronizes cool.

An Integral classifier at the top ensures that only the desired size of fine material leave the chamber.

The entire system is mounted on the loadcell system, that regulates the feed depending upon the weight of material that has passed the classifier after proper size reduction.

Thus, the product achieved is of sharp cut with narrow particle size distribution, which is easily controlled and reproducible.

CHEMFILT's Air jet mill, with Fluidised Bed Opposed Jets, are built to perform and sustain / keep up under rough, rigorous, continuous 24 x 365 hours operations with minimal down time.

Our "state of the art", "in-house", manufacturing facility & engineering expertise backed by experience of more than 2 decades in manufacturing, allow us to manufacture equipment in accordance with industry accepted "international codes and standards" to service our esteem clients' requirement and exceed their expectation, around the globe.

### Features and benefits:

- Average particle sizes up to 1– 2  $\mu$ , depending on material
- Integral forced-vortex classifier provides accurate control of product size
- On-stream adjustment of product size by variable speed classifier rotor
- Generation of superfines controlled by adjustment of jet velocity
- Suitable for handling highly abrasive materials
- Ability to accept feedstock up to 3 mm reduces need for pre-grinding low operating temperatures enable heat-sensitive material to be processed
- Options of MOCs of contact parts like mild steel (CS), Stainless Steel (SS304, SS316, etc), alternative wear resistance materials available for wear parts and/or mill linings
- Low operational noise levels
- Easy access for cleaning and maintenance
- Complete with automatic control system



## Constructional features:

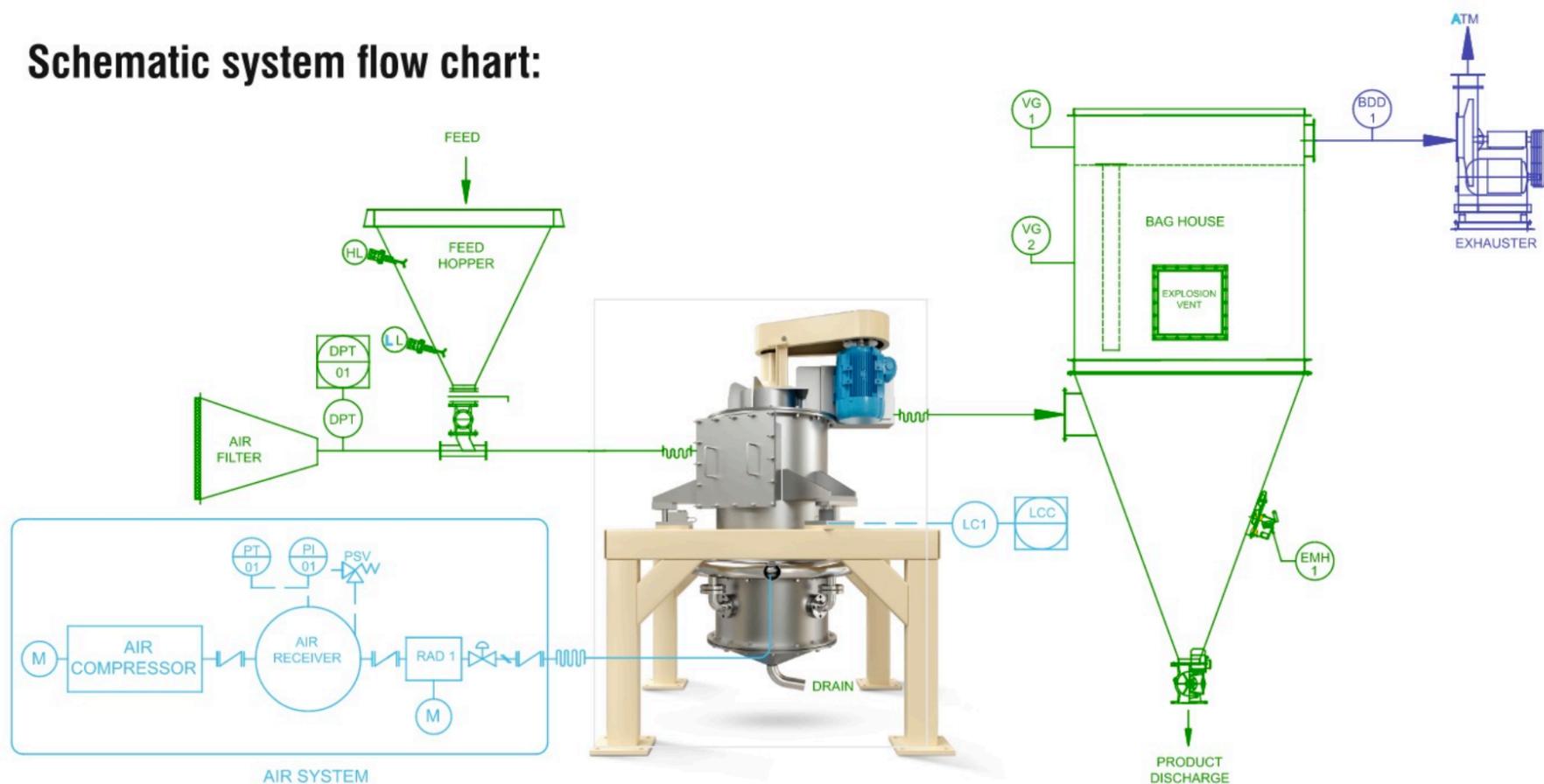
Exacting the standards to exceed customer expectation with performance par-excellence...

The Opposed air jet micronizers /Air jet mills, are designed and supplied as “total system” solution.

The system comprises of:

- Feed regulator with feed hopper,
- Main opposed air jet micronizer /Air jet mill with in-built classifier, compressed air header, flexible bellows & base for mounting on load cells,
- Reverse pulse jet type automatic in line cleaning bag filter with rotary airlock type discharger for collection of fine products,
- Suitably sized exhauster fan to run entire system in suction. negative pressure within the milling chamber provides dust-free operation,
- All interconnecting ducting and well-designed power and control panel with PLC and HMI for complete automated operations.

## Schematic system flow chart:



## Product range:

The CHEMFILT make opposed air jet micronizers /air jet mill are available in standard size range.

AJM Models	installed Kw	Compressor Kw for compressed air/nitrogen @ 6-7 Kg/cm <sup>2</sup> pressure
CFAJM 200	13	~50
CFAJM 300	28	~100
CFAJM 400	50	~200

“Go for the best” ... .. go for  
CHEMFILT make Opposed Air Jet Micronizers/Air Jet Mills – (AJM)



S.No. 881,882/1+2, 882/3+1, 882/3+2, 883, 885  
Near New Water Tank of G.I.D.C., Phase-IV,  
Karamsad-Gana Road, Karamsad-388325 Ta. & Dt. : Anand (Gujarat).  
Contact: (O) 02692-236846, 47, 48, 49, 50, 8460036846, 9033418900,  
Email : info@chemfilt.com  
www.chemfilt.com