

The CIMA Fluid Bed Dryer/Granulator provides for delicate handling and uniform drying of wet mixed formulations at incredibly fast speeds.

The Dryer becomes a granulator when a spray nozzle is introduced into the fluidizing chamber (top spray). As granule properties such as size, density and porosity can be accurately and effectively controlled via programmable processing parameters, Fluid Bed Granulations are notorious for their superior homogeneity.

The CIMA Fluid Bed Dryer/Granulator is configured with a split chamber bag house which allows for continuous processing. The same machine can also be equipped with a Wurster (bottom spray) or rotor insert (tangential spray) making it possible to dry, granulate, coat or pelletize with a single system.



## APPLICATIONS

- Fine Powder Coating
- Granule Coating
- Intermediate Size Particle Coating
- Tablet Coating
- Drying
- Granulating
- Instantizing

## FEATURES

- Stainless steel grade 316 L product contact parts
- Washable filter media, FDA approved
- Product bowl is raised hydraulically to compress gaskets with main body and conical product bowl for effective air-tight sealing
- Compact design of spray nozzle with three heads
- Integrated peristaltic metering pump
- Sample port built in
- Wash-in-place (WIP)
- Built-in explosion vents and isolation valves protect the equipment
- Regular automatic sequential purging of filters during process maintains consistent exhaust air flow with minimal pressure drop across the filters
- Highly polished interior follows established industry standards
- HEPA filtered supply air handler
- Fully automated process control systems available
- Bag or cartridge filters



## TOP SPRAY INSERT

### APPLICATIONS:

Drying  
Granulation  
Agglomeration  
Instantizing  
Coating

### BENEFITS/EXPECTED RESULTS:

Reduced Quantities of Fines  
Elimination of Powder Segregation  
Improved Flowability  
Improved Compressability  
Controllable Bulk Density  
Homogeneous Distribution of all components  
Optimized Solubility and Dissolution Properties  
Controlled Release of Active Ingredients  
Taste Masking



## BOTTOM SPRAY INSERT

### APPLICATIONS:

Film Coating  
Layering  
Granule Coating  
Spheroid Coating

### BENEFITS/EXPECTED RESULTS:

Active-Ingredient Layering  
Controlled Release of Active  
Fine Particle Coating  
Aqueous or Organic Coating  
Particle Size and Density Control  
Enteric Coating



## TANGENTIAL SPRAY INSERT

### APPLICATIONS:

Spherization  
Coating  
Layering  
Granulation

### BENEFITS/EXPECTED RESULTS:

Increased Density  
Smooth Surfaces  
Narrow Particle Size Distribution  
Powder Layering  
Improved Dissolution Properties  
Potential for Increased quantities of Active  
Improved Compressability  
Hot-Melt Coating

