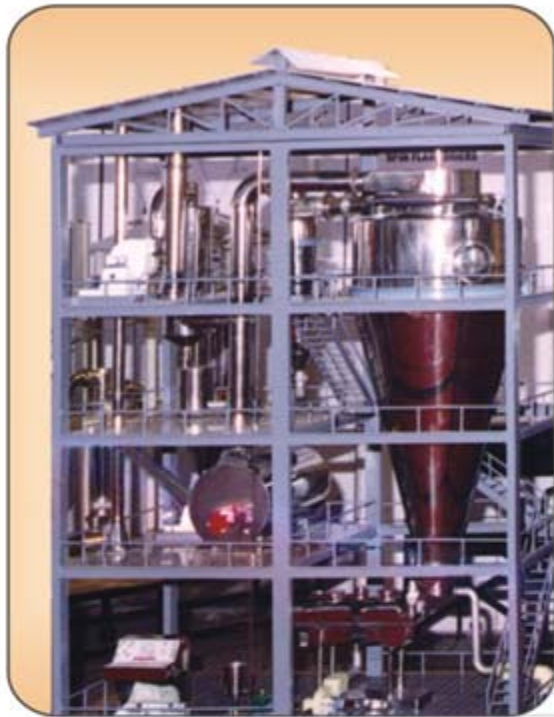


# FLUIDIZED SPRAY DRYER



Single stage spray driers offer particle sizes of dried material from 50 - 250 microns. For producing larger particles, Fluidized spray driers are employed. The atomization of the feed solution is done to produce large droplets and the drying in the first stage is done keeping the moisture content of the powder relatively high.

The moist powder is dried in the integrated fluid bed system at the bottom of the drying chamber using hot air, and in the process, agglomeration of fines to larger particles takes place. The absolute fines are carried with the exhaust air leaving the drying chamber to be collected in the cyclone and further recirculated to the drying chamber.

Tertiary drying system comprise of employing additional external drying system to further increase the particle size. Shown in the layout is one such system incorporating a fluidized spray drier with vibratory fluid bed drier.

## SPRAY DRYING APPLICATIONS

### DETERGENTS

Zeolite  
Alkyl benzene sulphonate  
Detergents  
Bleach activator  
SLS

### POLYMERS AND RESINS

ABS  
Acrylic polymer  
Melamine - formaldehyde  
Polyvinyl Acetate  
Urea - formaldehyde

### BIO CHEMICALS AND PHARMACEUTICALS

Herbal extracts      Enzymes  
Dextrose              Aloe vera  
Lactose  
Protein  
Haemoglobin  
Spirulina  
Sera  
Meat/ Broth/ Fish Products

### CERAMIC INDUSTRY

Alumina  
Aluminum Silicate  
Ceramics  
China Clay  
Ferrites  
Silicon carbides  
Zirconia  
Steatites  
Titanates  
Glass Slurry

### INORGANIC CHEMICALS

Aluminium Chloride  
Aluminium Hydroxide  
Ammonium Diuranate  
Barium Sulphate  
Calcium Chloride  
Calcium Chromate  
Catalysts  
Lead Chromate  
Manganese Sulphate  
Silica  
Zinc Sulphate  
Inorganic Pigments

### DYESTUFF & PIGMENTS

Reactive Dyes  
Disperse Dyes  
Acid Dyes  
Direct Dyes  
Vat Dyes  
Dye Intermediates  
Organic Pigments

### FOOD INDUSTRY

Milk Products  
Egg Products  
Food Colours  
Beverages  
Food Additives  
Vegetable Proteins  
Herbal Extracts  
Malto Dextrine  
Soup Mixes  
Flavours  
Soya Proteins  
Fruit Juice Concentrates