

Introducing India's Most Advanced



Two Stage Pulveriser

Model VI-450-30, VI-450-40 & VI-450-40x2

Powder Quality and Profitability goes hand in hand

Quality Powder = Economical Rotational Moulding.



Rotational moulding needs resin in powder form. The particle size, shape and particle size distribution is measure of powder quality. Powder quality plays a very important role in rotational moulding. Following are the resultant effects of the good quality powder.

- ▶ Optimization of charge weight to meet rising competition.
- ▶ Improved finish and colour of the product.
- ▶ Reduced fusion time in oven.
- ▶ A good quality light weight multi-layered and foam insulated tank.

Realizing the needs of the rotaitonl moulders, engineers at **Vinodrai** set out to develop the next generation two stage pulverizer. To achive above objective pulverizer must have following features.

- ▶ Ability and control to give uniform and consistant Powder Quality.
- ▶ Power required per kg. should be low for given mesh size.
- ▶ Cooling of grinding elements must be sufficient and effective.
- ▶ High Output rate to meet ever growing demand.
- ▶ Ability to run machine un-attended.
- ▶ All System protection to minimize breakdowns.
- ▶ Easy to clean & short colour change over time.
- ▶ User friendly operation.

Vinodrai two stage pulverizer is work-horse for leading rotational moulders.

Description Of Two Stage Pulverizer.

Vinodrai is manufacturing two basic models namely VI-450-40 & VI-450-30 with capacity to pulverise 120 Kg/Hr and 80 Kg/Hr respectively. The pulveriser consist of following main systems.

Two Stage Disc Mill :

Disc Mill is heart of pulveriser. Two stage feature insures course and fine grinding. This increases the life of fine teeth. Disc are made from special alloy steel imported from BOHLER Germany. Easy opening of the disc mill on hinge insures quick cleaning. No need to set the gap every time mill is opened for cleaning.



Bearing Housing :

Heavy duty, graded cast housing results in smooth running of the mill. Bearing set up is designed to take care of heavy thrust of grinding. Oil bath lubrication results in less energy consumption. Machine is also available with automatic oil circulating lubrication system. Disc is mounted on taper nose of the shaft to insure true rotation & easy dismantling.

Moving Disc Cooing :

"Dublin" USA make special rotary union supply water to moving disc through shaft. This not only cools moving disc but also keeps bearings running cool. This results in increase of out put and also machine can grind heat sensitive polymers. Taper lock pulley from "Fenner" improves transmission efficiency.



Vibratory Screen & Cyclone :

Large volume cyclone for efficient separation of powder and vibratory screen with anti-blocking deck insure trouble free flow of powder.



Control Panel :-

Sheet Steel powder coated housing enclosing all controls. Free standing ergonomically designed. Monitors temperature of disc mill & controls the feeding of material under over temperature condition. Circuit also monitors mill motor current and takes corrective action if mill motor draws more than set current. Control panel offers all protections and interlocks, so that machine can run un-attended safely.

Optional:

- ▶ 3 ton capacity closed loop water chiller.
- ▶ PLC controlled machine.

Specifications of Pulveriser :

| | VI-450-30 | VI-450-40 | VI-450-40x2 |
|--------------------------------|--|--|--|
| Type of Pulverizer | Disc Mill | Disc Mill | Dual Disc Mill |
| Disc Diameter | 450 mm | 450 mm | 450 mm |
| Main Mill Motor | 30 HP | 40 HP | 40 HP, 2 Nos |
| Output (With LLDPE RM Grade) | 80 kg | 120 kg | 240 kg |
| Vibro Siever | 900 mm | 1200 mm | 1500 mm |
| Siever Motor | 1.0 H.P | 1.5 HP | 3.0 HP |
| Air Lock Valve | 0.5 HP 16 rpm | 0.5 HP 16 rpm | 0.5 HP 16 rpm |
| Blower | 3.0 HP | 5.0 HP | 7.5 HP |
| Water Cooling | 1) Stator Disc 2) Rotor Disc 3) Main Shaft | 1) Stator Disc 2) Rotor Disc 3) Main Shaft | 1) Stator Disc 2) Rotor Disc 3) Main Shaft |
| Disc Temperature Monitor | Yes | Yes | Yes |
| Motor Current Monitor | Yes | Yes | Yes |
| Magnetic Separator | Yes | Yes | Yes |
| Auto Lub. Pump | Optional | Optional | Yes |
| Electrical Supply | 3 Ph 440 V AC 50 Hz | 3 Ph 440 V AC 50 Hz | 3 Ph 440 V AC 50 Hz |
| Connected Load | 35 HP | 47 HP | 91 HP |
| Over All Dimensions | 3.0 x 2.8 x 4.0 mt | 3.0 x 2.8 x 4.0 mt | 5.0 x 3.0 x 4.0 mt |
| Gross Weight in Kg | 2500 | 3000 | 4200 |

