



## *Colloid Mill GCM-5*



Colloid mills are specialized machines used for milling, homogenizing, dispersing and breaking down of agglomerates into small size particles. The primary function of this machine is to breakdown larger particles into uniform sized small particles. The raw material is fed into a hopper and made to pass between the rotor and stator elements. The material is subjected to high shearing and discharged from the hopper onto the second pass wherein it is recalculated; this is due to the conical shape of the machine and the centrifugal effect of the high speed rotating motor. The machine is equipped with cooling and heating jackets and flame proof motor. The output or productivity varies from machine to machine and depends on factors such as feed rate and viscosity of the raw material/particles.

### **Application of Colloid Mill:**

- Pharmaceuticals
- Suspensions
- Emulsions
- Cosmetics

## Technical Specification:

Model	GCM - 5 (Horizontal)
Output *	120 to 12000 Kgs. / Shift.
Particle Size Reduction **	5 to 10 Microns.
Hopper Capacity	15 Liters.
Motor	3 Hp / 2850 RPM / 3 Ph

\* Depending upon viscosity of material. \*\* Depending upon material.

## Salient Features:

- All contact parts are made out of SS 304 (SS 316 on demand at extra charges). No casting is used for avoiding contamination problems.
- Coupling provided between motor shaft and rotor shaft for ease in maintenance – Vertical Model.
- Three oil seals between the motor and the processing chamber to prevent liquid going in the motor winding, resulting in the burning of the motor.
- Modified design of semi concave teeth in rotor and stator reduced motor HP and gives better performance in size reduction without damaging the product.
- Extended bearing housing specially designed to facilitate fine adjustments of bearing clearances or backlash to avoid metal to metal contact of rotor and stator. This unique design provides smooth and consistence all round performance and long life of rotor and stator.
- Three-way cock for draining and re-circulation of liquids provided as standard.
- Contact parts can be easily dismantled for cleaning.
- Special design facilitates adjustment of grinding gap by an exterior screw by means of handle even during operation.
- Flameproof motor and flameproof rotary switch can be provided on request at extra cost.

## Utility Requirement:

- Electrical supply : 3 Phase + Neutral + Earthing
- Electrical load : 4 KW