

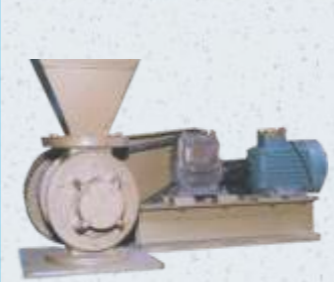
**SPECIAL FEATURES**



**PULSE AIR JET DUST COLLECTOR**



**REGULATED SCREW FEEDER**



**REGULATED DISCHARGE**



**ELECTRIC MIMIC PANEL**



**DEMONSTRATION - TRIAL ROOM FACILITY**  
With all Accessories :

1. All Types (12 Nos.) of PULVERISERS installed.
2. Different types of PULLEYS, SCREEN, GAP PLATES AND GRINDING ELEMENTS kept to conduct TRIALS on customer's materials.
3. TEST SIEVES, scientific WEIGHING facility available for SIEVE ANALYSIS for DRY as well as WET SIEVE TESTING.
4. More than 500 material samples and 4000 DATA available for REFERENCE.

**SGS** SGS India Limited  
Laboratory Services  
NY 093612  
COPY

**ANALYSIS REPORT**

Page 1 of 1  
Date of Issue: 11/1/01

**TEST REFERENCE: L15912M110**

Description of Sample: Carbonate in 20%  
Name and Address of Client: M/S. Preetam Petrochem Pvt. Ltd., Ahmedabad, (Gujarat, India)  
Certificate Number of Sample: SLS/000001/000001  
Supplier Name/Reference: Gwalior, Madhya Pradesh  
Reference No.: 06/7/01  
Date of Collection: 11/1/01  
Lab's Identification No.: 4237389

TESTS	RESULTS	TEST METHOD
1. Particle size		Mikroaspik
100 - 5 micron	83.9%	
75 - 12 micron	12.9%	
45 - 75 micron	2.5%	
44 to 100 micron	1.8%	
75 to 150 micron	1.8%	

Done by: **SGS INDIA LIMITED**  
Laboratory Services  
(Lab. Manager/Service Engg.)

**OUR OTHER SCREENLESS PULVERISERS**



**Whirlpool Micronizer**



**Wizzcon Mill**



**Pin Classifier Mill**



**Disc Mill**



**Ball Mill**

**Manufactured By:**

**PREMIUM PULMAN PVT LTD**

2009, Phase IV, GIDC, Industrial Estate, Vatva, Ahmedabad - 382 445. INDIA  
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**PROFESSIONALS IN SIZE REDUCTION TECHNOLOGY**

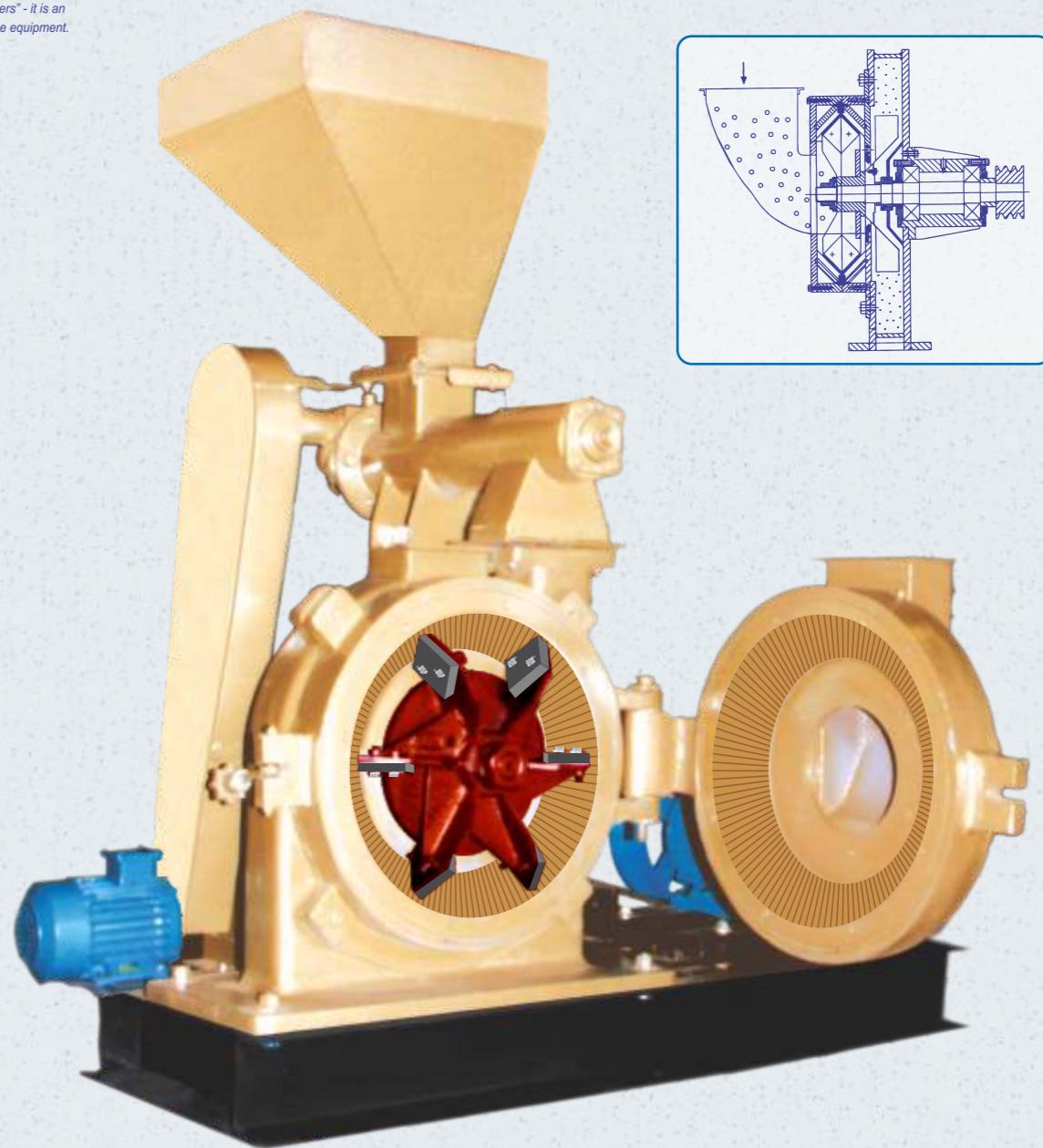
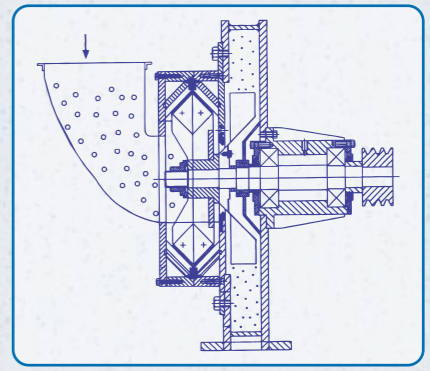


PC 2006-06



Fineness is not just a chance with the "PREMIUM pulverisers" - it is an intrinsic design of the equipment.

**PREMIUM - TCM TURBO CLASSIFIER MILL**



**SALIENT FEATURES**

- ❖ Screenless grinding
- ❖ Easy adjustable classifier plate
- ❖ Cool grinding
- ❖ High degree of fineness
- ❖ Grinding, classification & Conveying in one operation
- ❖ Sharp & narrow particle distribution
- ❖ Wide range of applications

**APPLICATIONS**

- ❖ Ayurvedic Herbs
- ❖ Broken Biscuit
- ❖ Catalysts
- ❖ Cellulose
- ❖ Chemical
- ❖ China Clay
- ❖ Diorok Powder
- ❖ Dyes & Intermediates
- ❖ Fibre Opening
- ❖ Fish Feed
- ❖ Flourcent Powder
- ❖ Gelatin
- ❖ Glucose
- ❖ Gram Dal
- ❖ Green Pigment
- ❖ Ibuprofen
- ❖ Jeera
- ❖ Milk Powder
- ❖ Neem Seed
- ❖ Peracitamol
- ❖ Pesticide
- ❖ Phenolic Resin
- ❖ Pottasium Carbonate
- ❖ Ppt Silica
- ❖ Red Oxide
- ❖ Salt
- ❖ Spices (chilly)
- ❖ Sugar
- ❖ Tea (waste)
- ❖ Turmeric
- ❖ Udad Dal
- ❖ Ultra - Marine Blue

## PRINCIPLES OF OPERATION

Premium Turbo Classifier Mill is a fine grinding mill with integrated grinding, classifying, and conveying operations. Depending upon the material characteristics and parameters, output fineness can be anywhere between 200 mesh to 450 mesh. The equipment is a screenless pulveriser. The equipment operates on principle of spiral classifications.

The main shaft carries the rotor & blower fan. It has an adjustable gap plate. The blower fan sucks the air from grinding chamber, and discharges the air and product to cyclone where the product is collected.

The gap plate adjustment alters the amount of air flow which results in withdraw from grinding chamber. Once gap plate is adjusted, output fineness is uniform.

The equipment is recommended for soft and brittle material having MOH hardness up to 3. The feed size should not exceed 6 mm.

## CONSTRUCTION DETAILS

### ROTOR ASSEMBLY: WITH MULTI EDGED BEATERS

This assembly consists of multi edged beaters mounted on rotor which is dynamically balanced. The complete assembly is secured to the grinding chamber with bearing housing. All bearings are lubricated & are protected against any leakage of ground product, dirt & moisture by means of a special sealing rings. The assembly is driven by Vee belt pulley.



### CONICAL LINERS:

This machined serrated conical liners are mounted inside the body & door. This gives more grinding area as compared to straight liners. These are easy to replace which reduces down time. Fine grinding can be achieved by shear, turbulence & impact between liners & beaters.



### CLASSIFIER PLATE (GAP PLATE):

By using different gap plates, the amount of flow will change (either increase or decrease). Due to this fineness will be adjusted. For many applications, Mill can run without GAP PLATE.



### DRIVES:

All driven motors are fixed to the base frame having slide rails and are easily adjustable. Power is transmitted by v-belts & pulleys. Tip speed can be varied by help of A. C. Variable drive, which is provided as optional accessory. To precisely control the feed variable feed drive can be provided as optional.

### WATER COOLING JACKET ARRANGEMENT:

Due to high air flow in the grinding chamber grinding occurs in cool condition. If necessary (for heat sensitive material) in built water cooling system can be utilised as equipment comprises with water cooling jacket arrangement.

## WITH GRAVITY DISCHARGE (B.O.T.)

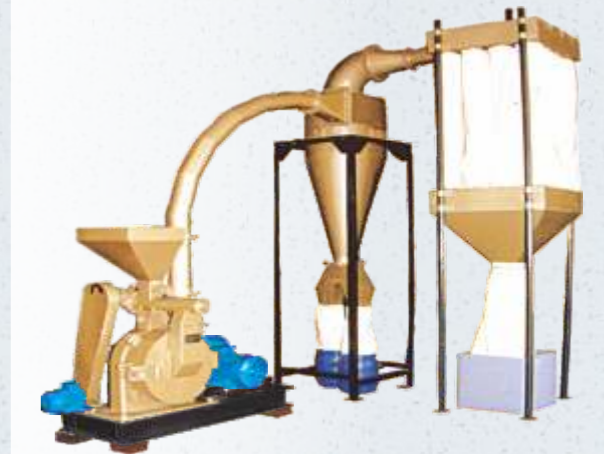


Lab model is compact and with 5 h.p. Motor is manually fed and have bottom open gravity discharge. This machine is ideal for small batch production.

- \* Model - PTCM - 5 (Baby)
- \* Rotor dia - 200 mm
- \* Motor H.P. - 5
- \* Capacity - 20-25 kg/hr.
- \* Space required - 1700 x 500 x 2000 mm

## WITH STANDARD DUST COLLECTION SYSTEM

Standard installation is with mill having in-built classifier gap plate, fan, cyclone collector and fabric type dust collector with suitable stands. At the outlet of cyclone, y-piece or/and rotary airlock valve is provided depending upon the application and fineness of end product. For sticky and large size installation additional suction blower is recommended.



### TECHNICAL SPECIFICATIONS

Model	Rotor Dia In mm.	Mill Motor H.P.	Capacity Upto Kg./Hr.	Space required L X B X H in mm.
PTCM - 10	300	10	50 - 80	7500 x 1500 x 4500
PTCM - 20	400	20	100 - 160	7500 x 1500 x 5000
PTCM - 40	600	40	175 - 250	8500 x 2500 x 5000
PTCM - 60	700	60	275 - 400	8500 x 2500 x 5000
PTCM - 80	800	75	450 - 650	8500 x 3000 x 5000
PTCM - 100	1000	100	750 - 1000	10000 x 4000 x 6000

## WITH PULSE AIR JET DUST COLLECTOR & ELECTRIC MIMIC PANEL



For very fine grinding, dusty, expensive and pungent material, it is recommended to have installation with reverse pulse air jet dust collector. They have a self cleaning arrangement, special type of fabric, solenoid valve and timer. The installation also have airlock valve attached at the outlet of dust collector. Thus installation is DUST FREE. The section of blower provides constant air flow for conveying and cooling. The damper controls the flow of air in the system. Mimic type electric control panel is provided with ammeters, relays, starters for almost automatic operation above system..

CAPACITY and FINENESS of END PRODUCT depend upon type of material, feed size and other characteristics. The capacities given in the table are TENTATIVE and will be different for different materials. Same way FINENESS also varies from material to material. Generally it is 75 to 37 microns

For applications, where COOL GRINDING is expected, a CHILLING PLANT can be offered in line with Mill, the AIR from ATMOSPHERE is sucked by CHILLING PLANT and temperature of this AIR is reduced by almost 20°C and such COOLED AIR is passed along with FEED MATERIAL in TURBO CLASSIFIER MILL. The rise in temperature during grinding is absorbed by COOL AIR. Same way, if FEED MATERIAL is having MOISTURE or is of Hygroscopic nature, HOT AIR GENERATOR can be incorporated in line with MILL and HEATED MATERIAL can be GROUND.

### TECHNICAL SPECIFICATIONS

Model	Rotor Dia in mm.	Power Consumption				Air volume in M <sup>3</sup> /Hr.	Rotor Speed RPM	Capacity Kg. /Hr.	Space required L X B X H in mm.
		Mill	Screw Feeder	RALV	Blower Fan				
PTCM-10 PAJ	300	10	0.5	0.5	3	550	6000	50-80	6000 X 3000 X 4000
PTCM-20 PAJ	400	20	1	1	5	1300	4320	100-160	7000 X 3000 X 4500
PTCM-40 PAJ	600	40	1	1	7.5	3500	2860	175-250	7500 X 3000 X 5000
PTCM-60 PAJ	700	60	1	1	10	3800	2450	275-400	8000 X 3500 X 5000
PTCM-80 PAJ	800	75	1	1	10	4000	2150	450-650	8000 X 4000 X 5000
PTCM-100 PAJ	1000	100	1	1	15	5000	1750	750-1000	10000 X 5000 X 6000

Capacity depends on material characteristics and fineness expected

SPECIFICATIONS AND DESIGN ARE SUBJECT TO CHANGE WITHOUT NOTICE FOR ANY ADDITIONAL IMPROVEMENT.