

# HIGH SPEED HEATER COOLER MIXER With

Bulk Powder Handling & Conveying Systems







PRIMETECH laid it's foundation in 1991 with a strong vision of becoming a world class leader only by delivering the ultimate quality products around the globe.

Primetech maintains a cutting-edge by efficient R & D division to meet specialized technological challenges. Total quality management systems relentlessly work towards achieving zero defect and failure free performance, leading to superior at remarkable competitive rates.

Primetech a worldwide reputation as an innovative producer of machinery for the industry has modern manufacturing facility plant located in Gujarat, INDIA.

Goal oriented dynamic employees & close co operation with customer specialists allow us to develop leading edge technology in Mixing, Grinding & Handling of materials.

# Industry Foot Print

- India fastest growing brand in High Speed Heater Cooler Mixer & Pulverizers
- 25 years of experience.
- 3 state of the art manufacturing units spread over an area of 1,00,000sq ft area equipped with ultra modern and sophisticated machinery.
- Offers High Intensity Mixers Efficient Cooler from 40kg batch to 500kg batch capacity.
- Serving Different Mixing application of industry including PVC Dry Blend, WPC & Master Batches.
- Offers Pulverizer from output ranging from 80kg/hr to 500kg/hr .
- Serving Pulverizing application of industry including PVC, cPVC, WPC, Roto-Molding & Mater batches.
- Installed capacity to deliver more than 300 units per annum.
- More than 1000 Mixing Plant in operation in India, Middle East, African Nations, United States & Latin America.
- More than 200 Pulverizing System in operation in India.

### **Product Key Attribute**

- All important plant components (mixing vessels, mixing tools, electrical cabinets, etc.) are manufactured in house, thus giving us a very tight control over the quality of our products.
- Robust construction.
- Only first-class electrical, electronic and pneumatic components, motors and gearboxes of international brands are used in our production.
- Ideal mixing Batch timings.
- Shorter cooling cycle.
- User friendly operation.
- Prompt and efficient after-sales service.



## Iways a step head in delivering











The PRIMETECH- mixer holds a great name for outstanding mixing technology, highest quality standards & competence in field of compounding with its unique machine design & performance.

Primetech high intensity mixer "PHM" is used for all bulk material application like to mix solid, liquid and pasty components where besides friction heat generation with shortest possible cycle time also the way in which the friction is introduced in to the product along with the finest material dispersion is of greater importance.

The unique designs of mixing bowl with large bottom radius and fluidizing blades make PRIMETECH -mixer in to a high performance machine and ideal solution when good quality material are required with high hourly output.



#### MIXING VESSEL AND **DEFLECTOR**

Internal surfaces in contact with material are made of stainless steel and Double steel jacketed. Contact surface are uniquely mirror polished for free flowing of material with deflector influencing the flow of material.





#### MIXING TOOL

suitable heat treatment process in order to enhance its wear resistance properties.



For easy service & maintenence of the machine



#### PROVEN PNEUMA-SEAL TECHNOLOGY

Prevents powder infiltration Into bearing and convincingly Increasing the bearing life period.

#### PERFORMANCE FEATURE

- Heater Mixer with good heating performance
- Suitable for plastic, minerals, chemical and colorant
- Short heating times
- Heat induced by friction
- Homogenizing in minimum of time
- Very robust & easy service construction of mixing vessel & tool
- Twin jacketed mixing vessel
- Fast and complete discharge of mixed material
- Improved tool life
- Long service life and less noise level
- · Excellent dispersion and optimum adaptability to each type and size of mixing batch



The PRIMETECH cooler mixer "PCM" works effectively in combination with upstream high intensity the PRIMETECH "PHM" for subsequently cooling of hot mixture in order to keep it in free flow condition, suitable to storage ,transportation and for subsequent processes.

For application in case of P.V.C & various other dry blends where static free, heat stabilized and stress free compounds are suitably required, PRIMETEH cooler mixer "PCM" delivers high heat transfer co-efficient, necessary for obtaining short cooling times for throughput capacities.

Mixing, dispersing process along with de-agglomeration are frequently of equal importance as factor concerning the handling of the machine.



#### **COOLING VESSEL**

Large bottom radius with mirror finished contact surface enabling gentle treatment of material due to large surface mixing and low speed.

#### **MIXING TOOL**

Process enhancing and self cleaning





#### **DISCHARGE VALVE**

Piston type valve with complete electro- pneumatic operation for Easy and smooth discharge of a material.





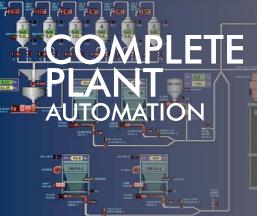
#### **CONTROL PANEL**

Panel construction and wiring as per international standards of panel design

#### PERFORMANCE FEATURE

- · High heat transfer co-efficient
- · Short cooling cycle
- Excellent dispersion with efficient cooling
- Robust, easily serviced and maintained construction
- · Corrosion and abrasion resistance
- · Easy and perfect cleaning

- Self cleaning, easy fitting and removal
- · Intensive cooling of mixed material
- · Long life and low noise level
- Twin jacket for cooling with forced circulation of cooling water



The PRIMETECH compounding plant automation system works effectively where realisation of high through output rates is combined thought of minimization of labour.

Perfect synchronization of process like material storage, conveying, weighing & mixing are of utmost importance when dealing with complete plant automation solution.

PRIMETECH automated plant system outperforms in all the manner whether process like automatic material handling or complete controlled process sequence are Concerned ,through highly advanced logic based controllers.

#### STORAGE >

Ground hopper for dumping of raw materials with suitable non-dusting system arrangement.

#### WEIGHING >

Precise and accurate weighing of raw materials and then feeding to heater mixer vessel in exact proportion as per recipe formulation data stored in the system.



#### PERFORMANCE FEATURE

- One-switch operation of entire plant
- High through output
- Reduction in labour and labour costs.
- 100% "Process in control" through intelligent feedback control system
- Easy operation & maintenance

#### MIXING

Guaranteeing complete reproducible and consistent dry blend properties and thus minimizing the extrusion scrap rate.

#### CONTROL

- Entire process sequence controlled through advanced PLC
- HMI for setting and changing the process as well the mixing parameters easily.
- Visual program display sequence by means of luminous signals.

### **PULVERIZER**



PULVERIZERs are used in application like pulverizing of Rigid & Soft PVC, uPVC and cPVC scrap waste in PVC processing industry & pulverizing HDPE, LDPE, LLDPE and various other thermoplastic materials for Rotational-Molding, compounding and master-batching applications where material are required in fine powder form.

PRIMETECH offers pulverizers of different output capacity ranging from 30kg/hour to 400kg/hour.

#### PERFORMANCE FEATURE

- High through output rate at minimum power consumption.
- One piece grinding disc made from high carbon steel promises maximum tool life at high wear rate.
- Easy operations & maintenance.
- Smooth performance at low noise level & minimum vibrations.
- Integrated advance sensors for safety & automatic operation of machine.

### **PRODUCT RANGE**

SR. NO.	MODEL	CHARGE BATCH CAPACITY (kg)	MAIN DRIVE PHM (kw)	MAIN DRIVE PCM (kw)	TOOL SPEED PHM / PCM (RPM)	VESSEL CAPACITY PHM / PCM (ltrs)	PRODUCTION CAPACITY (kg/hr)	COOLING SURFACE (sq. mm)
1	PHM 10/PCM 40	3	3.7	0.75	910/90	10/40	15	1.3
2	PHM 50/PCM 150	15	7.5	1.5	1000/90	50/150	75	1.7
3	PHM 130 R/PCM 400	40	15	3.7	1000/48	130/400	200	3.5
4	PHM 130/PCM 400	40	18	3.7	1000/48	130/400	200	3.5
5	PHM 200 R/PCM 400	70	30	3.7	1000/48	200/400	350	3.5
6	PHM 200/PCM 400	70	37	3.7	1000/48	200/400	350	3.5
7	PHM 200 R/PCM 600	70	30	5.5	1000/52	200/600	350	5.0
8	PHM 200/PCM 600	70	37	5.5	1000/52	200/600	350	5.0
9	PHM 250 R/PCM 600	90	37	5.5	1000/52	250/600	450	5.0
10	PHM 250/PCM 600	90	45	5.5	1000/52	250/600	450	5.0
11	PHM 350 R/PCM 600	140	55	5.5	1000/52	350/600	700	5.0
12	PHM 350/PCM 600	140	75	5.5	1000/52	350/600	700	5.0
13	PHM 350 R/PCM 1000	140	55	7.5	750/45	350/1000	700	6.5
14	PHM 350/PCM 1000	140	75	7.5	750/45	350/1000	700	6.5
15	PHM 500/PCM 1500	200	110	15	750/65	500/1500	1000	8.0
16	PHM 500/PCM 2000	200	110	18.5	750/65	500/2000	1000	11.0
17	PHM 750/PCM 1500	350	132	15	650/65	750/1500	1500	8.0
18	PHM 750/PCM 2000	350	132	18.5	650/65	750/2000	1500	11.0
19	PHM 1200/PCM 3000	500	250	37	600/65	1200/3000	2500	14.5

#### \*PRODUCTION CAPACITY BASED ON 5 BATCHES PER HOUR.

- Design and Specifications are indicative and as a part of our continuos development we reserve the right to change specifications without any prior notice.
- For customised applications specifications can be altered.
- Output depends on type of material, formulations, processing parameters & ambient temperature.







UNIT: 1

Plot No.: 4716 & 4717 | Phase - IV, Opp. Water Tank, G. I. D. C Vatva, Ahmedabad - 382 445 | Gujarat. India.

UNIT: 2

3/2 & 3/3 | Panchratna Industrial Estate, Nr. Baroda Express Highway, Ramol Over Bridge | Vatva, Ahmedabad - 382 445 | Gujarat. India

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