

PPS Air Classifier Mills

High
energy
grinding for
producing
ultra-fine
powders



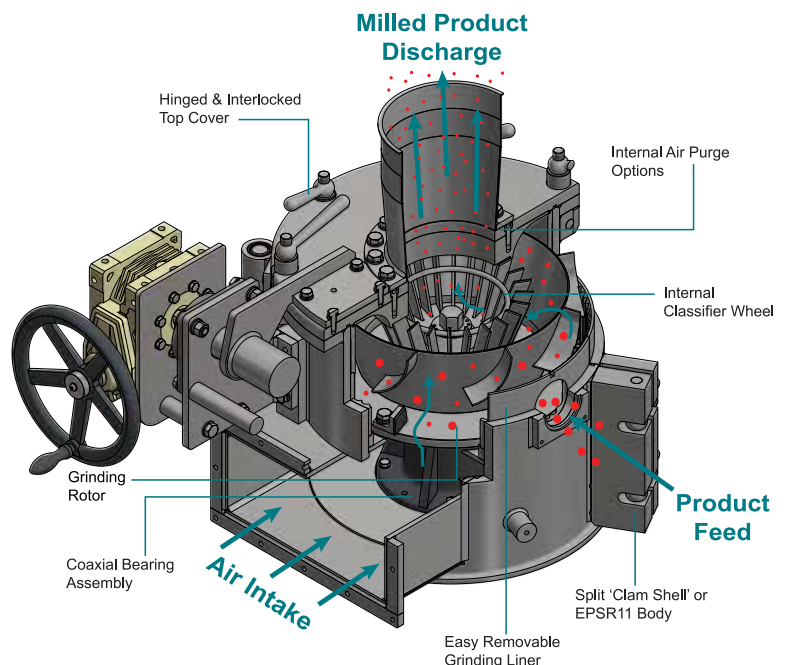


PPS Air Classifier Mill Operation

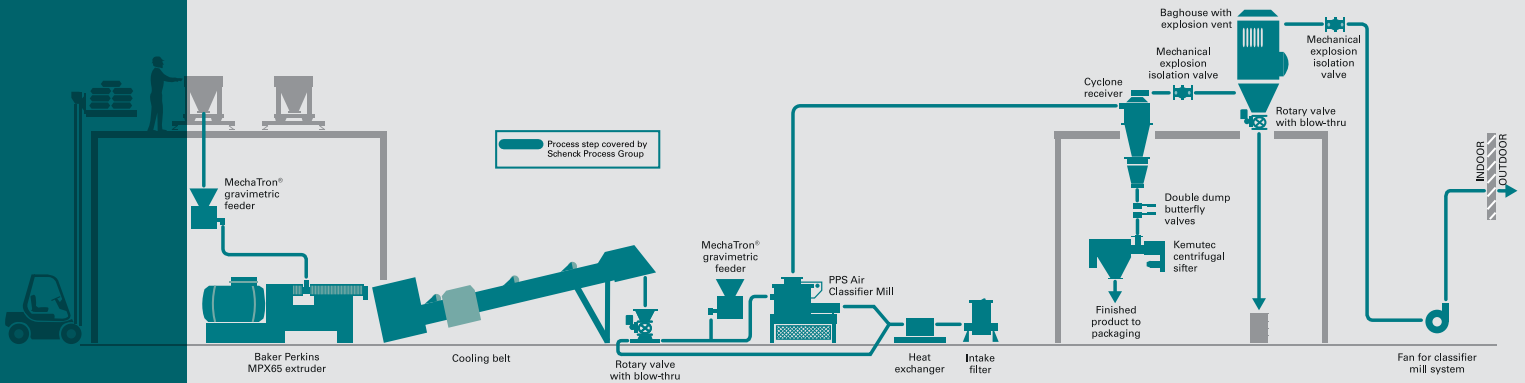
The PPS Air Classifier Mill is a vertical grinding mill incorporating an internal classifying wheel with an independent drive. Product is fed into the grinding chamber by either a feed screw or a pneumatic conveying system via a rotary feed valve.

The product is impacted by the high-speed grinding media which causes the feed particles to fracture and be thrown tangentially to the wall of the grinding chamber resulting in further particle size reduction. The particles are entrained in the induced airflow around the peripheral of the rotor disc. The airstream and entrained particles spiral upwards around the outside wall of the internal baffle assembly. The airflow and particles pass to the internal classifier which is rotating in the same direction as the rotor disc. Oversized particles rejected by the centrifugal force applied by the classifying wheel are thrown to the inner wall of the baffle and flow downwards. These oversized particles are then returned to the grinding zone where further impact occurs.

This recycle action continues until all the fine particles pass through the classifier wheel and are conveyed in the process air stream to either a cyclone collector or filter receiver.



Schenck Process Bulk Material Handling Solution



Model	Main Drive Power	Classifier Drive Power	Approx. Airflow
Lab CMT	1.5 hp	1 hp	175 cfm
1 CMT	5 - 7.5 hp	1 - 3 hp	250 - 350 cfm
3 CMT	10 - 20 hp	3 hp	525 - 1,075 cfm
5 CMT	30 - 50 hp	5 - 10 hp	1,600 - 2,700 cfm
7 CMT	60 -100 hp	10 -15 hp	3,200 - 5,000 cfm
8 CMT	120 - 200 hp	20 - 40 hp	6,400 - 10,000 cfm
10 CMT	250 - 350 hp	40 - 60 hp	10,500 - 18,000 cfm
12 CMT	400 - 600 hp	60 - 75 hp	21,000 - 32,000 cfm

PPS Air Classifier Mill Range

PPS Air Classifier Mills are manufactured in carbon or stainless steel and can be designed to withstand 10 Bar EPSR. All machines have the unique PPS design with either a single or double opening grinding chamber to facilitate easy cleaning and maintenance. PPS Air Classifier Mills also have a versatile drive mounted either above or below the grinding chamber base. Most PPS Air Classifier Mills are fitted with manually operated gear units for lifting the grinding chamber cover lid with the exception of the 8 and 10 CMT models, which are fitted with a motorized gear drive for lid opening.

Applications

PPS Air Classifier Mills are supplied for either batch process or for continuous operation. They are supplied to all industries that produce fine powders where control of the particle size distribution is required. Typical applications are found in the following industries, Chemical, Minerals, Pharmaceuticals, Food, Powder Coatings and many others. All systems are designed to handle both inert and explosive applications where venting or containment is required.

Testing

Kemutec offers full product testing at the Kemutec Technology Center just outside of Philadelphia, PA.

Testing offered for the following equipment:

- » PPS Air Classifier Mills
- » Kek Centrifugal Sifters
- » Kek Universal Mills, Cone Mills and Kibblers
- » GKM Flat-Deck Screeners

Features

- » Temperature controlled grinding
- » Constant output
- » Tight particle size distribution
- » Easy to clean with unique side opening design of PPS CMT Mills
- » Easy to adjust particle size capability

Typical Milled Products Include:

- » 12X Powdered Sugars
- » Sodium Bicarbonate
- » Powder Paints
- » Clay Powders
- » Dairy Powders
- » Wheat Gluten
- » Dairy Powders
- » Grains
- » Resins

BV-P5096EN. All information is given without obligation.
All specifications are subject to change. © 2023



A versatile design that can be customized to suit the demands of individual applications and physical layouts.

Ultra-fine and controlled particle sized grinding



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