

FINEX PELLETIZERS CATALOGUE

Model Diameter Length Capacity KGS/HR HP

FPM500	500MM	2500MM	1500KGS	40/60
FPM 600	600MM	3000MM	4000KGS	75/100
FPM 800	800MM	3500MM	6000KGS	100/120
FPM 1200	1200MM	4800MM	10,000/15,000kgs	200/250

WORKING OF PELLETIZER

The Pin Pelletizer Mixer is a high-speed mixer, agglomerate that conditions and micro-pelletizes by converting the fine powders into small agglomerates through the action of a high speed rotor shaft with pin assembly in a MACHINED STATIONARY CASING .

The Pelletizer produces spherical micro-pellets, granules by combining the dry feed with a liquid binder/water mixture. Pellets are formed when the dry feed particles are dispersed by the rotor in the first section of the chamber that comes in contact with fine sprays of binder solution or water. The high-speed rotation of the rotor with atomizing of spray coats individual powder particles with the binder that pelletizes the particles into roundish spheres, granules.

The Pelletize speed can be varied from 100 to 750 RPM. The gap between the Rotating Rotor and casing can also be varied from 3mm to 6mm. Accordingly the pellets size dia will be determined

Powder is fed from the top at 12 o'clock position and Pellets of proper sizes as set will discharge from the bottom chute at 6 o'clock position.

For best pelletizing Results

- Powder is to be fed at a Fixed Feed rate with Rotary Feeder or Screw Feeder
- Finer the particle size better the pelletizing, finer than 150 microns powder is best suited
- Particle size / Density/Moisture/Chemistry/Temperature all need to be synchronized
- Constant binder spray pressure of 40 to 50 psig must be maintained .30 to 40% moisture to powder will give best results.

FINEX Pin Mixer Write up

The FINEX Pin Mixer Pelletizer is a pin-type Continuous Equipment designed for applications requiring high energy input to materials for Pelletizing Like in mixing and pelletizing in powders. It is a high speed, conditioning and pelletizing device that converts dust into small agglomerates through the action of a high speed rotor shaft and pin assembly with the addition of liquids such as water, binders such as molasses, oils, surfactant.

The Pin-Mixer features a cylindrical, stationary machined shell with a length-to-diameter ratio of 3500mm to 400 to 700mm. Inside the shell is a shaft with radically -extending rows of pins on a helix pattern. There is a close tolerance between the tips of the pins and the inside of the mixer shell.

Shaft rotational speed, tip speed, is 350 to 600 RPM), The material enters at one end of the Shell and is whipped by the pins as it moves from the inlet of the shell to the bottom outlet. As a fine spray of liquid is added at the entry section and distributed throughout the powder By a Dozzing spray pump and spray nozzles on top of the Pelletizer, Fine mixing or micro-agglomeration will occur. The end result is a agglomerated and densified micro-pellet.

Pelletizer Design is offered with jacketing for passing steam at 140 degrees centigrade or CHILLING with gases or chilled water as is required in food concentrates like mango, guavere, the in jacket above Pelletizer shell to ensure continous pellets formation with minimum powders.

The Pin Mixer is ideally suited for applications requiring extreme micro-pelletizing, mixing- conditioning with small pellet size control and preparation of a feed mixture for further processing in a pelletizer. Materials agglomerated in the Pin Mixer include: Foods, Flours Fertilizers, Chemicals, Flyash, carbon black, cement kiln dust, pigments, coal dust, pesticides, electric furnace baghouse dust, Minerals, limestone fines, graphite, coke, petroleum coke fines, bauxite and silica fume.

Pelletizing system can pelletize in to 0.3-5mm pellets, and the pelletizing ratio can approach between 75% to 98%. Efficiency .
CONT INOUS ROUND PELLETS GRANULES DISCHARGE.

Equipments are manufactured in SS304 AND SS316L. Pelletizer capacity is from 500kgs/hr to 5000kgs/hr various sizes are offered