

Comminuting Mill FM-N



PMS HAMMER MILL® is primarily an impact mill. It is widely used for particle size reduction process of fine grinding of dry material. Hammer mill can also be used to process wet or dry granulations and disperse powder mixtures.

The particle size and throughput of the ground material is controlled by type of hammer, rotor speed and size of screen.

Theory of Operation

The feed material is presented into PMS HAMMER MILL® through adjustable-angle feeding tray or through feeding chute. Swinging blades are affixed to a high-speed rotor mounted in a chamber. The chamber is bounded on the bottom by an interchangeable screen through which the milled material must pass. The rapidly rotating hammers strike against the feed material, breaking it into smaller fragments, which are swept against the screen. Particles, that is small enough to pass through the screen, drop through the discharge chute into a collection container.

Type of hammer, rotor speed and size of the screen openings are important factors governing the particle size of the product. Flat-edge hammers are generally used for pulverizing and tend to create a large number of fines. Knife-edge hammers are generally used for chopping and sizing when fines are undesirable or when fibers and tissues must be severed. Product particle size varies for a given screen according to the rotor speed.

The discharge product is actually smaller than the nominal dimensions of the screen opening. Finer particles are produced with a given grid at higher speeds. The driving is through belts and pulleys. The bearing and seal design in such a way that no contamination from driving unit would enter the processing chamber. The motor and mill assembly are mounted on a common base plate which carries the ground product discharge chute and a rigid support frame, resulting a compact design configuration.

Application:

- Pharmaceuticals: Raw material, Herbal Medicine, Sugar
- Cosmetics: Raw Material, Pigment
- Food: Sugar agglomerate, Cocoa press cake, Tapioca Starch, Rice, Manioc, Dry Vegetable, Pepper, Dry Spices, Extracted bones, Milk Powder
- Chemical: Industrial Chemical, Agricultural Chemicals, Pigments, Powder Metallurgy, Fine Chemicals, Fertilizers

Benefit:

- Compact cGMP Design
- Cost Effective
- Versatile for wide product variety
- Robust structure
- Low Dust and Low Noise
- Easy to operate, clean and maintenance

Technical Data:

		FM-N
Capacity*	Kg/h	100-300
Driving Unit	KW	5.5
Width	mm	788
Length	mm	1,4
Height	mm	1,945