

THE INDUSTRIAL HAMMER MILL: A VERSATILE WORKHORSE

Schutte Hammermill, Quality Since 1928



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HAMMERMILL

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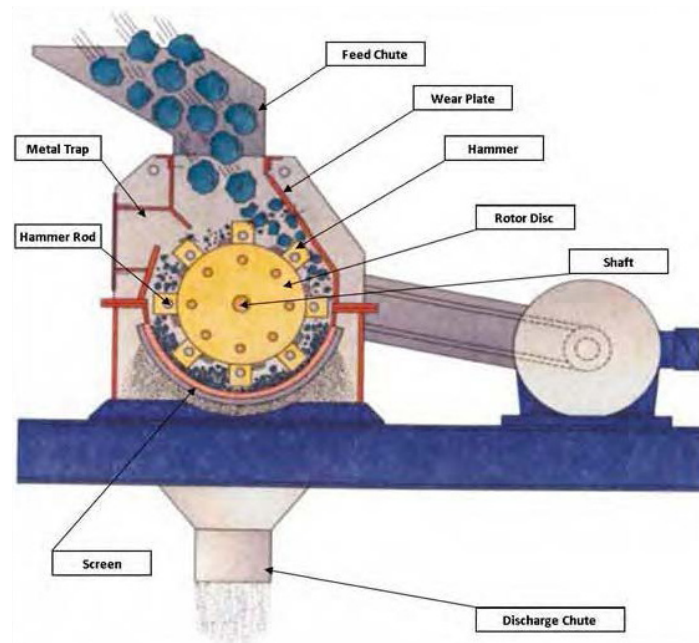
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One Design, Many Applications. The basic design of the industrial hammer mill is really quite simple:

- A steel chamber containing a shaft to which rectangular steel hammers are affixed.
- Replaceable plates lining the mill's interior to reduce wear caused from grinding abrasive materials.
- Steel screens or bar grates cover the mill's discharge opening.



How does a hammer mill work?

- When material enters the grinding chamber, it is repeatedly struck by hammers that flail out as the shaft spins.
- A combination of these hammer blows, particle on particle impact, and impact with the walls of the grinding chamber all work together to break the material down.
- The material remains in the grinding chamber until it is reduced to a size that will pass through the screen.

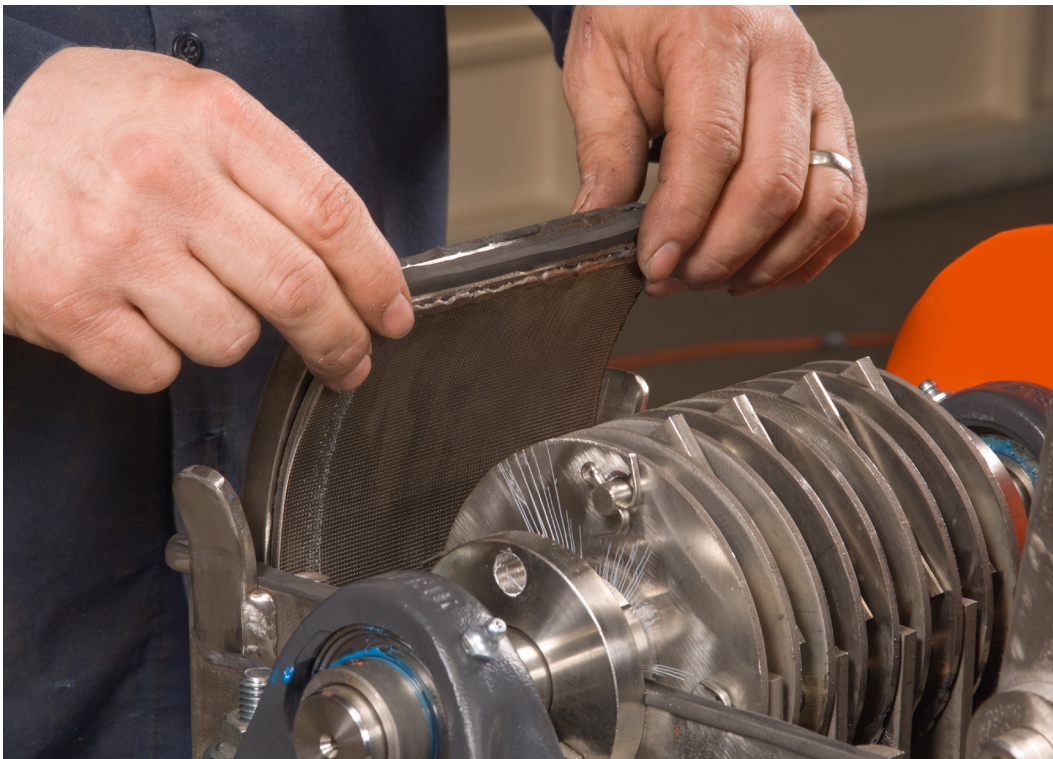
Ideal Applications

Ideal Applications

The flexibility and design simplicity of the industrial hammer mill lends itself well to processing a wide variety of materials, including:

- Stone
- Concrete
- Lime
- Glass
- Aggregates
- Ceramics
- Coke
- Chemicals
- Coal
- Fishmeal
- Brass
- Metals
- Bonemeal
- Porcelain
- Resins

...just to name a few

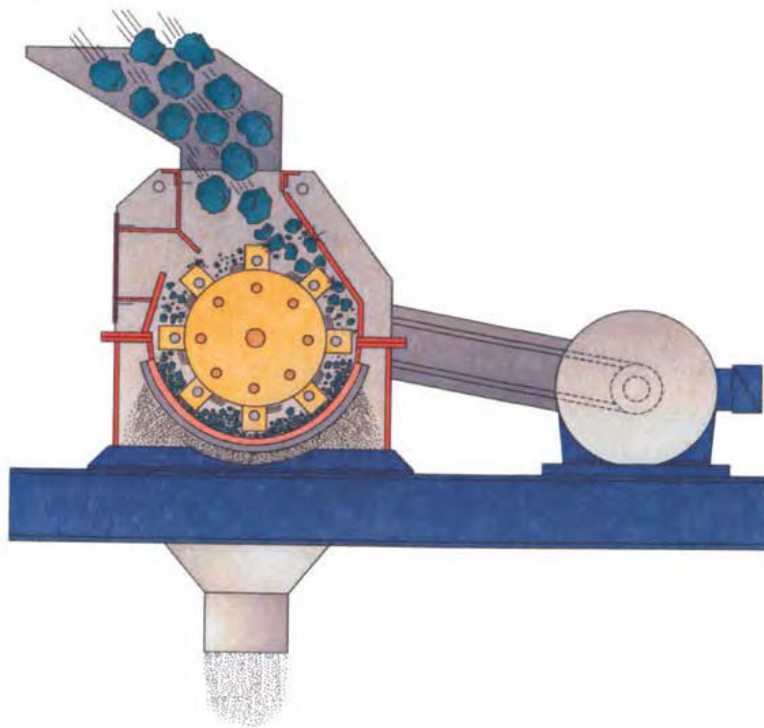


Hammer Mill Configuration

The same hammer mill for fishmeal and coal? Well, yes and no. The basic framework of the mill is the same. However, the configuration of the variable components is how they differ. That determination is based on the following criteria:

- Material being processed – Material characteristics such as: friability, flowability, moisture content, and infeed size
- Desired finished particle size – Gravel, granules, powder?
- Desired production rate – 10 lbs/hr, 10tph, etc.

Hammer Mill Configuration



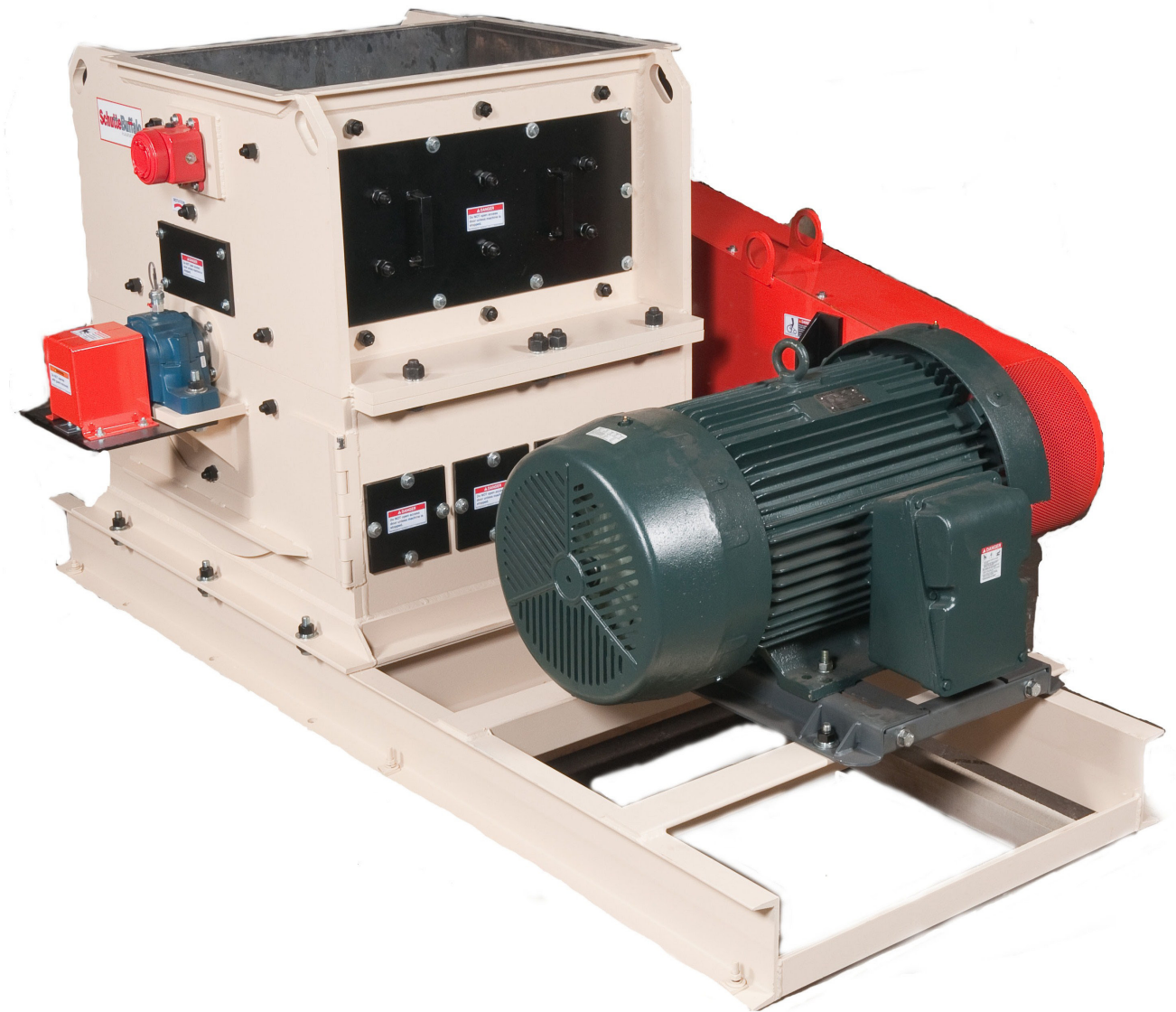
With this information, the following can then be determined:

- Hammer mill size - Rotor diameters between 6" and 44", and internal mill widths of 6" to 72".
- Hammer size and style - Number of hammers, size, style and metallurgy.
- Screens or bar grates - Style and thickness of screen or bar grates, and size of openings.
- Choice of proper RPM

It's Optional...

Finally, once the mill is configured, the last determination is whether or not any optional peripheral equipment is needed. Answers to these questions will help to determine the best types of optional equipment such as belt conveyors, augers, rotary feeders, and dust collection, as well as the most efficient design of the infeed and discharge chutes:

- Is dust a concern?
- How will the material be fed into the mill? By hand, auger, or belt conveyor?
- How will the material be taken from the mill? Heavy materials such as stone or metal may evacuate via gravity, while light or low density materials will require pneumatic suction.



Ready to learn more?

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