



## KEY FEATURES

- Durable, welded carbon steel or stainless steel construction
- Simple, single-stage grinding for most dry, free-flowing materials
- Precision tolerances between rotor blade and grinding jaw or screen for uniform size-reduction
- Large screen-to-horsepower ratio ensures maximum capacity for each model
- Interchangeable screen & jaw combinations for more versatility
- Large access door and streamlined interior for easy cleaning and maintenance
- Grinding blades, screens and jaws designed for easy replacement with minimal tools
- Outboard mounted spindle with high-grade labyrinth seals for maximum bearing life
- Standard-shaft grounding brush mitigates against internal electrostatic discharge
- Optional bearing monitoring package to complement existing predictive maintenance programs
- Ten-Bar shock-pressure-resistant construction available
- Sanitary construction features available



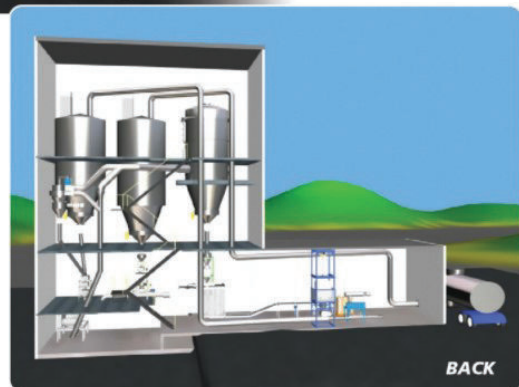
Replaceable Grinding Blades



Sieve Ring Assembly with Six Jaws

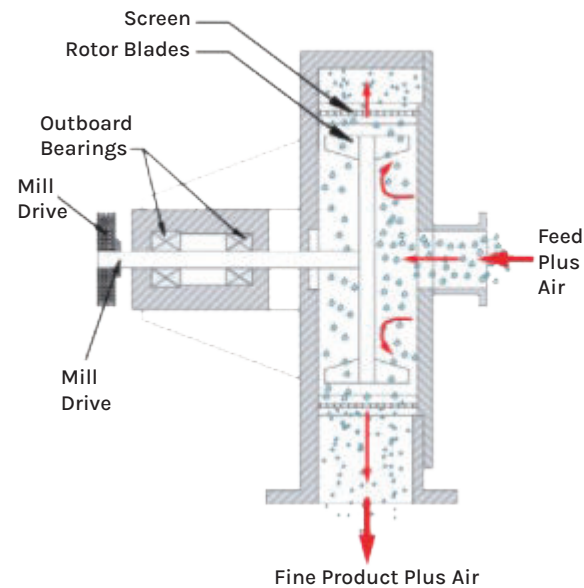


Grinding Jaws provide for a finer grind and a more precise particle distribution

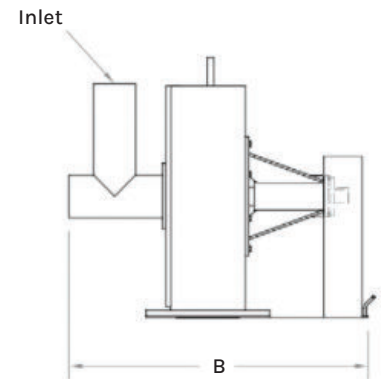
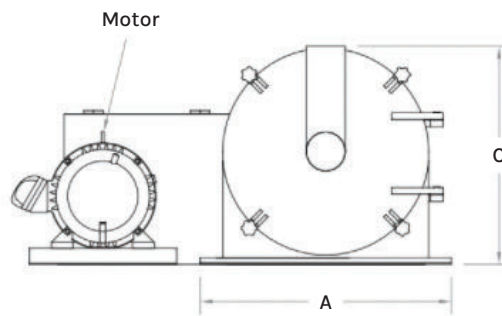
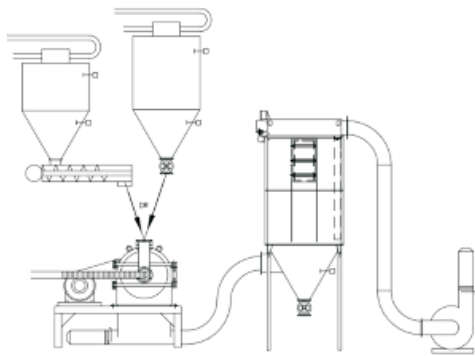


# GENERAL DIMENSIONS \*

Model	HP	Nominal Airflow CFM	A (in mm)	B (in mm)	C (in mm)
M-19	3-5	150	15 381	13 330	12.5 318
M-21	10-15	600	21 533	27 559	19 48.3
M-36	20-30	900	28 711	35.75 908	26.5 673
M-51	40-60	1500	39 991	44 1118	34 864
M-76	75-125	3000	48 1219	65 1651	48 1219
M-101	125-300	6000	62 1575	77 1956	64 1626



\* Do not use for engineering purposes. Please request a certified drawing for all layout or construction purposes.



## KEY BENEFITS

Prater Fine Grinders' highly efficient design permits ease of access to all internal components, one bolt allows for quick removal of the rotor.

Prater Fine Grinding Mills come in six standard sizes, ranging from the 3 HP M-19 pilot-scale lab mill to the 300 HP M-101 model. All Prater Fine Grinders are designed with standard safety features, including a trapped keydoor safety interlock system that prevents unintended access to internal rotating parts during operation.

Prater Fine Grinders are designed and precision-built for maximum operational efficiency and years of trouble-free operation.

## THEORY OF OPERATION

Prater Fine Grinders operate on the principle of high-speed impact. Raw material is meter-fed into the center of the mill where rotor blades impact individual particles. Material is accelerated outward, creating more impact and shear across the face of stationary jaws and screens. These stationary surfaces also decelerate the particles, maximizing their impact speed differential as they rebound back into the rotor blade's path. When the particles are properly sized they are pulled through the screen apertures for transport to the next stage in the process.

