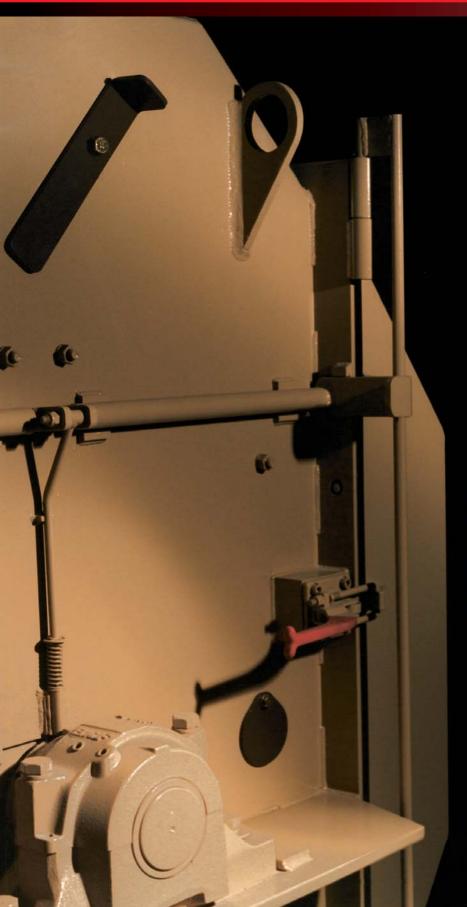
ELIMINATOR

HAMMERMILL







Impacting Industries Worldwide.

ELIMINATOR QUAL

QUALITY FEATURES

- Doors ... Our heavy-duty 3/8" plate doors hinge left or right so they can be completely removed for greater accessibility this is not an option, but a standard feature on every Bliss Hammermill. Also all parts of the door lock hinges are secured to the doors or the mill, eliminating loose pieces that could create a safety hazard.
- Internal Wear Plates ... The Eliminator is designed to do all the grinding against replaceable wear plates. Never against the mill housing. Wear plates are available in different metals for better wearing characteristics and are constructed in two pieces with each half removable from the side doors.
- Screen Carriage ... The Eliminator's one-piece screen carriage is manufactured of round rod and flat mild steel. Minimal screen blanking takes place with the round rod, and the mild steel takes more shock than high carbon steel. (We do not use bicycle chain or split carriages to hold the screen in place.) The most positive seal available.
- Screen Carriage Lock ... The extra heavy-duty carriage locks are one-piece in construction. They are spring loaded and shock absorbent and can be changed out quickly. These high quality springs are especially designed for their application.
- <u>Screens</u> ... We use all staggered perforated screens with no special mounting angles, flanges or bands. These plain screens will cost you less.
- Mill Housing ... The heavy one-piece plate housing decreases the noise level while the octagonal shape creates vortices designed to slow both air and product in the mill. This improves grinding performance and prolongs hammer and screen life. Bliss mounts the rotor between the bearings. No overhung rotor. Still because of the Eliminators superior design, the rotor can be removed from the side, without removing the upper mill housing and feeder system.
- <u>Vortex Cutter Bar ...</u> The Vortex Cutter Bar slows the air and product forcing recirculation back into the hammers for more effective grinding and greater capacity on the upside screen.
- Bearings ... the two-piece SKF "CC" series spherical roller bearings are standard bearings and have a block on each side to secure the rotor in the center of the grinding chamber. Eliminating the need to drill new holes for roll pins, etc. should you destroy a bearing housing.
- Dual Chamber Design ... All Mills 40" and wider are built standard with a dual grind chamber and split screen design, i.e. a 40" wide mill would have four 20" wide screens which are easier for the operator to handle.

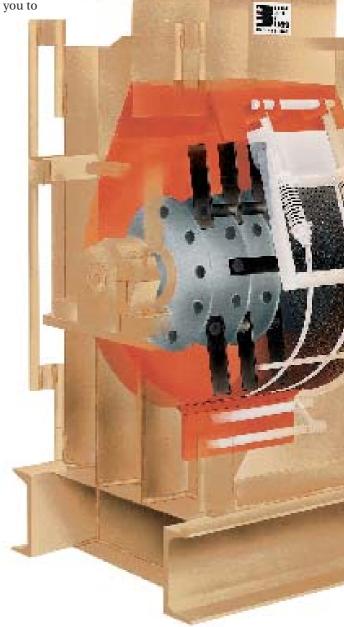
UNMATCHED CONVENIENCES

- Service ... At Bliss Industries, service is our number one priority. We believe than even the best designed equipment is only as good as the service it receives.
- Easy Access ... The Eliminator is the most accessible Hammermill on the market. The doors can be opened and the screens removed in less than 60 seconds from the time the rotor is stopped.
- Easy Maintenance ... The Eliminator can be completely rebuilt in less time than it takes to get any other Hammermill apart. You'll never need a cutting torch to remove any part on the Eliminator.

• Parts Replacement ... The Eliminator is designed to use standard off-the-shelf parts, of course, we appreciate your



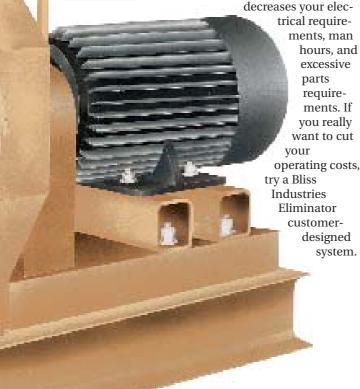
choose.



ITY FEATURES

SUPERIOR ROTOR DESIGN

- Reversible Rotor ... No need to get inside the Eliminator to reverse the rotation of the rotor and hammers. All changes are made on the exterior of the mill and bi-directional Hammermilling is achieved with no directional gate.
- Rotor Balance ... The Eliminator rotors are balanced at their actual operating speed, not at 900 rpm or less. They are balanced in the mill with the bearings with which they are going to be operating. All bearings have a break-in period.
- Rotor Design ... The Eliminator rotors are all machined and assembled with spanner nuts. With welded rotors, the welds do not break, but the metal fatigues beside the welds.
- Recessed Rotor ... Our rotors are recessed behind the internal wear plates to reduce air circulation around the outside of the rotor, this decreases wear on the outside rotor plates and hammers.
 - Rotors Double-drilled ... Our rotors are double-drilled for hammer to screen spacing of 3/16" or 1/2". This allows the use of the same hammer on two or more mills and products, cutting inventory requirements and chances of costly mistakes.
 - Simplicity ... Simplicity has no substitute it



INDUSTRIAL STRENGTH EFFICIENCY

- Sliding or JIB Swinging Doors ... These Door types are standard on all mills 40" and wider or optional on most models.
- Sanitary Design ... The sanitary design is available as an option on all Eliminator Models.
- Braking System ... We have a manual disc brake design as well as electronic braking systems for a "fast stop" of the rotor.
- Dual Motor Base ... You can reduce your electrical demand at start up with dual motors. Smaller motors are cheaper to stock and easier to find in emergency situations.
- Industrial Hammermill ... Our Standard Eliminator incorporates a more robust design than other manufacturer's "Heavy-Duty" models. However, we recommend the "Industrial Eliminator" for those 7 day 24 hour requirements.
- Safety ... At Bliss Industries, safety is a design element in everything we build. Neither Eliminator door can be opened in either direction before the standard equipment drive shaft locking device is engaged. The operator cannot enter the mill until the rotor has stopped. We stress the use of the safety micro switches on the doors to break the electrical starting circuit. We also recommend the vibration sensor switch.
- Customer Designed ... We have listened to our customers and their employees' on the weak areas of Hammermills for many years before designing the dual-screen Eliminator Hammermill. We have heard your suggestions on what you want and need, and sincerely believe we can increase your profits by helping to eliminate the difficult problems and excessive costs in hammermilling.
- Magnets ... Magnets are no better than the service they receive. So we designed a self-cleaning magnetic adapter that can be operated manually or automatically with an electric air cylinder. One control, manual or automatic, operates the magnets and tramp metal discharge gates. These can be stacked with only one air cylinder operating all functions, compared to a separate air cylinder for every function on other brands. The imagination is the only limit on where these can be installed.
- Screen Area ... A Hammermill is an impact mill and the screen does the sizing for the particles exiting from the grinding chamber. Screen area and open screen area is a critical factor when sizing and installing a successful efficient grinding system. The Eliminator has more effective screen area than other models advertising more screen area because of the design and wrap of the internal grinding chamber.

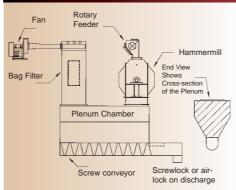


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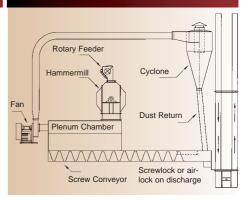
Air Relief Assist - Negative **Product Conveying**

Cyclone w/ pull through exhaust Hammermill w/ air pan Rotary Feeder Air lock

Air Relief Assist w/ Bag Filter



Air Relief Assist w/ Cyclone Separator



HAMMERMILL SPECIFICATIONS

Domestic 60 Cycle Applications						International 60 Cycle Applications				
Diameter	RPM	Tip Speed (FPM)	H.P.	Screen Area (sq.in.)	Diameter	RPM	Tip Speed (M/SEC)	H.P./KW	Screen Area (sq.cm.)	
19"	3600	17907	5 - 100	312 - 1152	19"	3600	91	5 - 100	2013 - 7432	
22"	3600	20735	15 - 150	513 - 1620	22"	3600	105	15 - 150	3310 - 10452	
26"	1800	12252	15 - 150	608 - 1920	26"	1800	62	15 - 150	3677 - 11613	
38"	1800	17907	25 - 500	950 - 6000	38"	1800	91	25 - 500	6129 - 38710	
44"	1800	20735	40 - 600	1140 - 7200	44"	1800	105	40 - 600	7355 - 46452	
52"	1200	16336	60 - 600	1656 - 6912	52'	1200	83	60 - 500	10684 - 44594	
Industrial Applications - 24 hours/day Diameter RPM Tip Speed H.P. Screen Area					International 50 Cycle Applications Diameter RPM Tip Speed H.P./KW Screen Area					
		Tip Specu	11.1.	OUICUII AICA	Diamotor	I II IVI	пр ороба		Screen Area	
		(FPM)	11.1.	(sq.in.)	Diamotor	T (T TV)	(M/SEC)	,	(sq.cm.)	
19"	3600		10 - 50		22"	3000		15-150/11 - 112		
19" 22"	3600 3000/36000	(FPM)		(sq.in.)			(M/SEC)		(sq.cm.)	
		(FPM) 17907	10 - 50	(sq.in.) 576	22"	3000	(M/SEC) 88	15-150/11 - 112	(sq.cm.) 3310 - 10452	
22"	3000/36000	(FPM) 17907 17279/20735	10 - 50 15 - 150	(sq.in.) 576 513 - 1620	22"	3000 3000	(M/SEC) 88 104	15-150/11 - 112 15-150/11 - 112	(sq.cm.) 3310 - 10452 3677 - 11613	



WARNING LABELS "Industry Standard" Safety Warning Labels are applied as recommended and prepared by the AFIA Equipment Manufacturers Council.

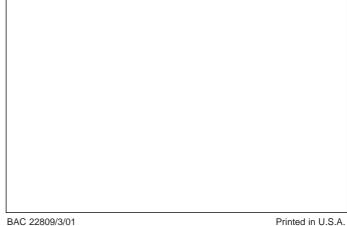


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•Specifications are subject to change without obligation or notice.

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