

BLADE MILLS



BLADE MILLS

How it Works

While very similar in appearance to Coarse Material Washers, EIW Blade Mills function quite differently. The major difference between the two is that any material and water that enters the Blade Mill must exit through the discharge opening located at the washer box opposite the feed end. As a Blade Mill is installed at a 0° to 5° slope, all solids material and water discharges at the opposite end of the incoming feed to downstream processing equipment.' Blade Mills use an alternating combination of paddles and flights the entire length of the shaft to scour, abrade and break down deleterious material. The shafts are capable of having various configurations. Blade Mills should be installed on a slope of 0 to 5 degrees. Due to the lower machine operating slope, Blade Mills have higher capacities compared to Coarse Material Washers of the same size

Applications

Blade Mills are designed to help producers begin liberating light, loamy clay or dirt from either coarse rock and/or sand before further processing. Blade Mills can be used in a variety of applications. For example, when washing coarse rock, the Blade Mill can be placed ahead of a wash screen to result in cleaner rock or ore. When washing finer materials, such as sand, the unit can be placed ahead of a screen, Sand Classifying Tank or Fine Material Washer. Because all the material and water exit the unit, the discharge material cannot be fed onto a conveyor belt. Generally, the amount of water needed for a Blade Mill is an additional one-third of the weight of the material being processed.

FEATURES

- Pre-Scrubbing for raw feeds that contain high silts
- Normally used to scrub 1-1/2" minus
- · Increases sand equivalency levels
- Increases screening efficiency
- Capacities 35% to 50% greater than standard CMWs
- Water is added through the rising current manifold and discharged along with product
- Equipped with full-depth wear shoes and reversible paddles made from abrasian-resistant White Iron
- Reverse paddles to increase retention time



Blade Mill Size and Capacity Chart					
	Size - Dia. x Length (Metric)	100% Screw RPM	HP (kW)	Capacity - STPH (MTPH)	Maximum Feed Size (mm)
SINGLE SHAFT	22" x 18'	40	15	70	2.0"
	24" x 18'	40	20	90	2.0"
	30" x 18'	35	30	155	2.5"
	36" x 18'	32	40	230	2.5"
	44" x 20'	26	50	300	3.0"
DOUBLE SHAFT	30" x 18'	35	2 - 30	310	2.5"
	36" x 18'	32	2 - 40	460	2.5"
	44" x 20'	26	2 - 50	600	3.0"
	48" x 24'	26	2 - 75	770	3.0"

Capacities are based on solids feeds weighing 100 pounds per cubic foot or 1.6 metric tons per meter cubed

*Not available in Condor model.

** Maximum feed size in all 3 dimensions.



Rock and sand being scrubbed in a Blade Mill



Rock and sand entering a double shaft Blade Mill