

Eagle Iron Works

THE LEADER IN AGGREGATE PROCESSING EQUIPMENT

Fine Material Washers

Single Screw Units
Double Screw Units

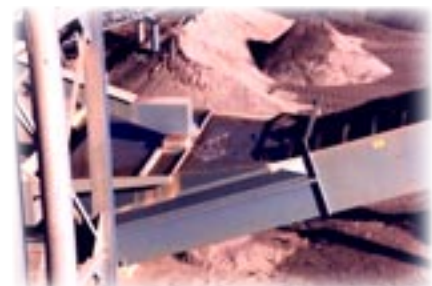


The Eagle Fine Material Washer has three related functions: washing, dewatering, and classification.

Washing is the primary function and is accomplished by the continuous rotation of the conveyor shaft and the velocity of the overflowing waste water acting on the feed material. The rotating shaft causes the feed material to roll and tumble, which in turn provides particle on particle attrition. This action allows deleterious coatings to be removed from the sand product and discharged with the overflowing waste water.

De-watering is the secondary function and is achieved by conveying the product up an inclined tub to allow the free water to drain from the material. This is accomplished with the use of a close-clearance curved plate on one side of the conveyor shaft and a drainage trough on the other side. Water is allowed to drain from the product as spiraled shaft augers material up the inclined curved plate. This process results in a drier final product that allows for more salable product and less water!!

Classification is the third function and is achieved by adjusting the volume of water over the adjustable-height weirs. For maximum material retention, the washer's three adjustable weirs are set level to provide a low overflow velocity. For coarser mesh hydraulic splits, the adjustable-height weirs are offset to provide a higher overflow velocity.



SINCE 1872



Eagle Iron Works

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Eagle Single Screw & Double Screw Fine Material Washer Features



Eagle Gear Reducer

- Designed & built at Eagle facilities
- Heavy-duty design with heat-treated helical gears
- Triple reduction gearing allows 100% to 16% speed changes
- 100% of the shaft's thrust load carried by the output shaft(s)
- Oil bath lubrication for maintenance-free operation
- Drive guards standard equipment

Conveyor Shaft

- Helical spiral segments with continuous submerged arc weld
- Extra-thick, one piece shaft tubing

Wear Shoes

- Replaceable Ni-Hard wear shoes standard, 600 Brinell hardness
- Wear shoes cover the full face of spiral
- Optional urethane wear shoes available

Washer Tub

- Fabricated with thick gauge steel
- Close-clearance curved plate runs entire length of shaft
- Extra-wide side flares for maximum product retention
- Adjustable weirs for out of level conditions
- Spherical-roller rear grease bearing(s)
- High-efficiency electric motor(s)

Feed Box

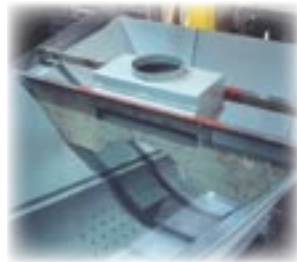
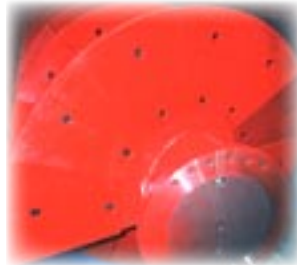
- Internal and external baffles to deaden feed velocities
- Provides uniform slurry mixture for maximum product retention

Rising Current Manifold

- Reinforced distribution manifold

Optional Equipment

- Discharge Chute
- Overflow Flume
- Washer Supports
- Safety Covers
- Pillow-Block Rear Bearing(s)



Fine Material Washers

Single Screw Units
Double Screw Units

Single Screw Washers

Washer Size	Maximum Capacity	Elec. Motor H.P.	Shaft R.P.M.	Machine Wt. (lb.)	Mach. Operating Wt. (lb.)	Hydraulic Mesh Split		
						100 Mesh	150 Mesh	200 Mesh
20" Dia. x 22'	30 t.p.h.	5	38	5,500	16,850	435	190	110
24" Dia. x 22'	50 t.p.h.	7.5	32	6,400	17,850	505	225	130
30" Dia. x 25'	75 t.p.h.	15	26	8,600	24,900	595	265	150
36" Dia. x 25'	100 t.p.h.	15	21	10,250	29,800	720	320	180
44" Dia. x 32'	175 t.p.h.	25	17	17,900	69,900	1720	760	460
48" Dia. x 33'	208 t.p.h.	30	17	21,150	85,400	1965	872	490
54" Dia. x 34'	275 t.p.h.	40	14	28,540	115,850	2090	930	575
66" Dia. x 35'	400 t.p.h.	60	11	40,200	131,000	2590	1150	650
72" Dia. x 38'	475 t.p.h.	75	11	50,750	202,031	2830	1260	710

Double Screw Washers

Washer Size	Maximum Capacity	Elec. Motor H.P.	Shaft R.P.M.	Machine Wt. (lb.)	Mach. Operating Wt. (lb.)	Hydraulic Mesh Split		
						100 Mesh	150 Mesh	200 Mesh
36" Dia. x 25'	200 t.p.h.	30	21	19,650	54,550	1250	640	360
44" Dia. x 32'	350 t.p.h.	50	17	36,200	124,200	2800	1440	810
48" Dia. x 33'	416 t.p.h.	2 x 30	17	43,600	142,000	3100	1550	860
54" Dia. x 34'	550 t.p.h.	2 x 40	14	55,000	164,200	3700	1750	935
66" Dia. x 35'	800 t.p.h.	2 x 60	11	77,450	253,400	4375	2100	1095
72" Dia. x 38'	950 t.p.h.	2 x 75	11	104,210	347,400	5040	2250	1250

Single & Double Washer Notes:

Machines are designed to process minus 3/8" material. Consult factory for larger materials.
Capacity ratings based on stockpiled materials and are for reference only.

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