

# COARSE MATERIAL WASHERS

EIW Coarse Material Washers provide light to moderate scrubbing and washing to remove soluble clays and dust coatings that are encountered in natural and crushed stone applications.

The scrubbing and attrition of deleterious materials are accomplished by the action of the corrugated paddles cutting through the slurry. This action results in particle-on-particle scrubbing to promote the separation of coatings from the coarse aggregate. The combined action of the paddles along with the rolling and tumbling generated by the rotating spirals releases deleterious materials from the product material into the overflowing wastewater.

Each EIW Coarse Material Washer is fabricated with a rising current manifold to provide an upward current of water to assist in removing unwanted materials. Deleterious materials of light specific gravity, such as twigs, sticks and lightweight coals, are floated by the rising current of water and the jiggling action of the paddles within the tub. The deleterious materials are then removed by the overflowing wastewater.

Each EIW Coarse Material Washer can be configured to meet specific scrubbing needs by adding more paddles to the conveying shaft(s). Additional paddles allow material to be retained in the tub area for additional scrubbing; however, the increased retention time will reduce the overall capacity of the unit.



## Design Features

Eagle's designed and built heavy-duty gear reducer

Extra-thick, one-piece shaft tubing

Heavy-duty cast hubs provide wear protection

Six sets of paddles are standard, with the option to increase the amount of paddles for improved scrubbing

Replaceable Eagle Armor wear shoes and paddles

Paddle and flight sections easily changeable in the field

Washer tub is fabricated with thick gauge steel

Close clearance curved plate runs entire length of shaft

Adjustable end weir for improving trash removal capabilities

Rising current manifold

Spherical-roller rear grease bearing(s)

High-efficiency electric motor(s)

## Optional Features

Discharge Chute | Washer Supports

Safety Covers | Pillow Block Rear Bearing(s)

**Note:** 44" and 48" Coarse Material Washers feature formed steel spirals and paddle hubs which are welded to the shaft.

# COARSE MATERIAL WASHERS

## Single Screw - Coarse Material Washers

Size (Dia. x Length)	Maximum Capacity	Maximum Material Size	Water Required	Electric Motor	Shaft (RPM)	Machine Wt. Empty	Machine Wt. Operating
22" x 18' (558 mm x 5.4 m)	45 to 55 STPH (40.8 to 49.9 MTPH)	2" (50 mm)	250 to 350 USGPM (56.7 to 79.4 m³/hour)	10 HP (7 kW)	40	6,050 lb (2744.2 kg)	10,650 lb (4830.7 kg)
24" x 18' (609 mm x 5.4 m)	60 to 75 STPH (54.4 to 68.0 MTPH)	2" (50 mm)	300 to 400 USGPM (68.1 to 90.8 m³/hour)	15 HP (11 kW)	40	7,100 lb (3220.5 kg)	15,350 (6962.6 kg)
30" x 18' (762 mm x 5.4 m)	100 to 125 STPH (90.7 to 113.4 MTPH)	2.5" (63 mm)	350 to 450 USGPM (79.4 to 102.2 m³/hour)	20 HP (15 kW)	35	9,450 lb (4286.4 kg)	22,250 lb (10092.4 kg)
36" x 18' (914 mm x 5.4 m)	150 to 175 STPH (136.0 to 158.7 MTPH)	2.5" (63 mm)	400 to 600 USGPM (90.8 to 136.2 m³/hour)	30 HP (22 kW)	32	12,150 lb (5511.1 kg)	30,350 lb (13766.5 kg)
44" x 20' (1117 mm x 6.0 m)	200 to 250 STPH (180 to 225 MTPH)	3" (76 mm)	450 to 550 USGPM (103.2 to 124.5 m³/hour)	40 HP (30 kW)	26	20,600 lb (9363.5 kg)	36,500 lb (16590.9 kg)

## Double Screw - Coarse Material Washers

Size (Dia. x Length)	Maximum Capacity	Maximum Material Size	Water Required	Electric Motor	Shaft (RPM)	Machine Wt. Empty	Machine Wt. Operating
30" x 18' (762 mm x 5.4 m)	200 to 250 STPH (181.4 to 226.8 MTPH)	2.5" (50 mm)	600 to 800 USGPM (136.2 to 181.7 m³/hour)	2 x 20 HP (30 kW)	35	17,150 lb (7779.1 kg)	35,350 lb (16034.4 kg)
36" x 18' (914 mm x 5.4 m)	300 to 350 STPH (272.1 to 317.5 MTPH)	2.5" (50 mm)	700 to 900 USGPM (158.9 to 207.4 m³/hour)	2 x 30 HP (45 kW)	32	22,000 lb (9979.0 kg)	49,800 lb (22588.9 kg)
44" x 20' (1117 mm x 6.0 m)	400 to 500 STPH (362.8 to 453.5 MTPH)	3" (76 mm)	900 to 1,100 USGPM (207.4 to 249.8 m³/hour)	1 x 75 HP (60 kW)	26	34,400 lb (15603.5 kg)	69,000 lb (31297.8 kg)
48" x 24' (1219 mm x 7.3 m)	500 to 600 STPH (453.5 to 544.3 MTPH)	3" (76 mm)	1,200 to 1,400 USGPM (272.5 to 317.9 m³/hour)	1 x 100 HP (112 kW)	26	39,590 lb (17957.7 kg)	97,740 lb (44334.1 kg)

