



CLASSIFYING TANKS

EIW Sand Classifying Tanks are used for any of the following individual functions or combination:

- 1) Removing or scalping excess water from a dilute sand slurry feed
- 2) Classifying a typical 2.6 to 2.7 SG material by removal of excess of certain intermediate mesh sizes
- 3) Retaining finer mesh sizes
- 4) Making multiple products from a single feed material for most all construction sand specifications

They are effective, low maintenance units that with either a slurry or a dry feed handle sand gradation swings in the average deposit or in a manufactured crushed sand, while minimizing waste.

Sand classification is based on the different settling rates of various grain sizes. As water and material enter the feed end, coarser grains settle first, and finer grains settle in successive sizes down (or along) the length of the tank. At the top of the tank, a series of hydraulic control mechanisms operate the discharge valves at the bottom of the tank. Depending on the type of control system and product produced, one, two, three or four discharge valves are located at each station.

The Eagle Classifying Tank has a large settling area which makes it easier to retain fine mesh particles and produce secondary and tertiary products such as masonry/mortar, asphalt, golf and other specialty sands.

Classifying Tanks can be supplied with EIW's Digital Dialsplit or Mark X control systems. Information on these PLC driven systems can be supplied on request.

DESIGN FEATURES

Tub Construction

- Extra-long weirs for maximum product retention
- Adjustable weirs for out of level conditions

Classifying Tank Stations

- Heavy-duty, double acting hydraulic cylinders for accurate valve discharging
- Valve and paddle rods feature thick diameter steel
- Individual components simplify troubleshooting and minimize maintenance costs

Hydraulic Power Unit

- Robust hydraulic power unit with long service life

Collecting-Blending Flume

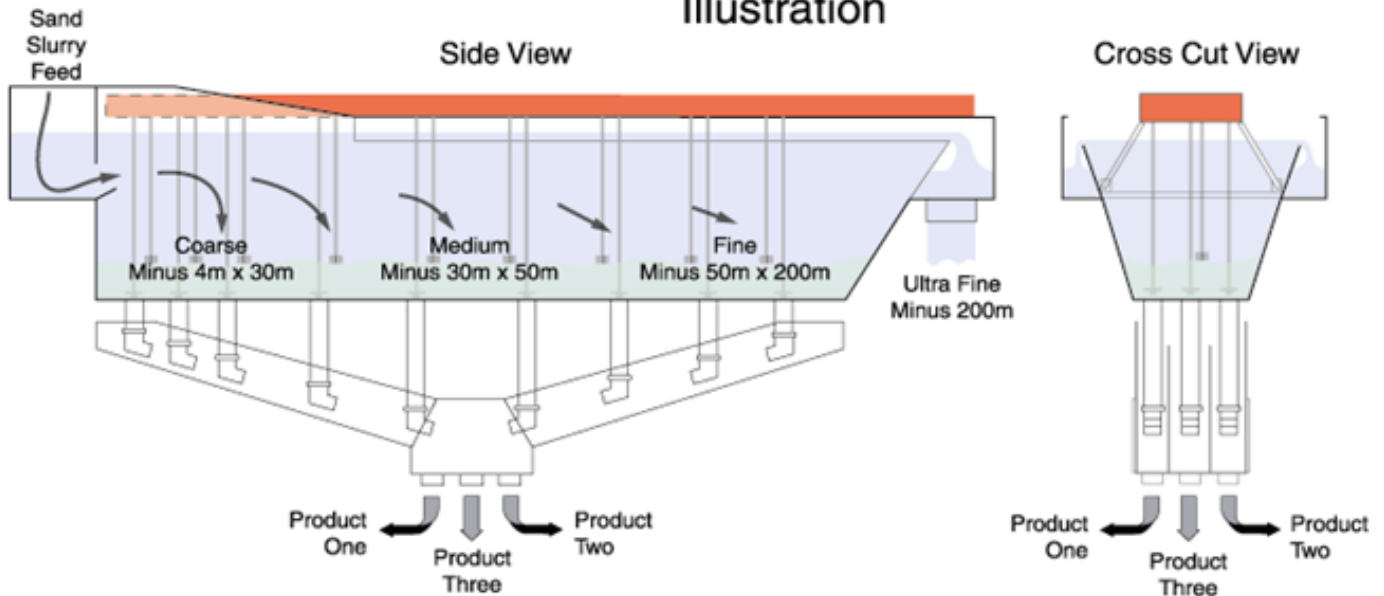
- Designed to prohibit product contamination in high tonnage situations
- Flume assemblies are standard with abrasion-resistant metal liners
- Flume assemblies are standard with abrasion-resistant metal liners. Other types liners materials are available on request.

Stationary Units & Capacities				
	Tank Size (Length x Width)	Maximum Gallons Per Minute (m ³ /hour) Of Slurry At Low Silt Content Allowable In Saving Fine Sand Retained On:		
		100 Mesh	150 Mesh	200 Mesh
Single Tank	20' x 8' (6.1 x 2.4 m)	2,300 GPM (522.4 m ³ /hour)	1,200 GPM (272.5 m ³ /hour)	700 GPM (158.9 m ³ /hour)
	24' x 8' (7.2 x 2.4 m)	2,800 GPM (635.9 m ³ /hour)	1,400 GPM (317.9 m ³ /hour)	800 GPM (181.7 m ³ /hour)
	28' x 8' (8.5 x 2.4 m)	3,200 GPM (726.7 m ³ /hour)	1,600 GPM (363.3 m ³ /hour)	900 GPM (204.4 m ³ /hour)
	32' x 8' (9.7 x 2.4 m)	3,500 GPM (794.9 m ³ /hour)	1,800 GPM (408.8 m ³ /hour)	950 GPM (215.7 m ³ /hour)
	24' x 10' (7.2 x 3.0 m)	3,500 GPM (794.9 m ³ /hour)	1,800 GPM (408.8 m ³ /hour)	950 GPM (215.7 m ³ /hour)
	28' x 10' (8.5 x 3.0 m)	4,100 GPM (931.2 m ³ /hour)	2,100 GPM (476.9 m ³ /hour)	1,100 GPM (249.8 m ³ /hour)
	32' x 10' (9.7 x 3.0 m)	4,700 GPM (1067.4 m ³ /hour)	2,400 GPM (545.0 m ³ /hour)	1,250 GPM (283.9 m ³ /hour)
	36' x 10' (10.9 x 3.0 m)	5,300 GPM (1203.7 m ³ /hour)	2,700 GPM (613.2 m ³ /hour)	1,400 GPM (317.9 m ³ /hour)
	40' x 10' (12.2 x 3.0 m)	5,900 GPM (1340.0 m ³ /hour)	3,000 GPM (681.3 m ³ /hour)	1,550 GPM (352.0 m ³ /hour)
Dual Tank	48' x 12' (14.6 x 3.6 m)	8,100 GPM (1839.7 m ³ /hour)	4,200 GPM (953.9 m ³ /hour)	2,150 GPM (488.3 m ³ /hour)
	32' x 10' (9.7 x 3.0 m)	9,400 GPM (2134.9 m ³ /hour)	4,800 GPM (1090.1 m ³ /hour)	2,500 GPM (567.8 m ³ /hour)
	36' x 10' (10.9 x 3.0 m)	10,600 GPM (2407.5 m ³ /hour)	5,400 GPM (1226.4 m ³ /hour)	2,800 GPM (635.9 m ³ /hour)
	40' x 10' (12.2 x 3.0 m)	11,800 GPM (2680.0 m ³ /hour)	6,000 GPM (1362.7 m ³ /hour)	3,100 GPM (704.0 m ³ /hour)
	48' x 12' (14.6 x 3.6 m)	16,200 GPM (3679.4 m ³ /hour)	8,400 GPM (1904.8 m ³ /hour)	4,300 GPM (976.6 m ³ /hour)

General Single Classifying Tank capacities are: Max for 8 ft wide units: 250 stph, for 10 ft wide units 350 stph, for 12 ft wide units 450 stph. Capacities may vary due to your sand feed gradation and product specifications. Double Classifying Tanks are available for higher capacities and dilute suction dredge fed plants.

Typically, classified sand products are dewatered are dewatered by EIW Fine Material Washers or Dewatering Screen systems.

Water Scalping-Classifying Tank Illustration



Sand classification is based on the different settling rates of various grain sizes. As water and sand solids enter the feed end, coarser grains settle first, and finer grains settle in successive sizes down (or along) the length of the tank.