

Sand Classifiers



Screw Classifiers are used to separate water and silt and other unwanted fines from sand while dewatering. Screw Classifiers are built in single or twin-screw configurations with a large settling area for best salvage of fine sands. The TelSmith Screw Classifiers come in a wide range of sizes to cover nearly all requirements and specifications.

Separate the sand you want from water, silt and other unwanted fines. TelSmith Sand Classifiers are elevating screws operating at a slow speed to separate sand 10 mm and smaller so it can be dewatered sufficiently to be carried on an inclined conveyor. Unwanted clay and debris is floated over the adjustable weirs.

Normally, feed to sand classifiers comes from a washing screen or from the discharge of a dewatering and classifying tank.

TelSmith Sand Classifiers are available in capacities from 6 to 364 tph.

TelSmith Classifiers for years have been a major factor in high volume production at plants where product requirements are strict, capacities huge, Up-to-date low maintenance machine design is a must.

Now they have been made even more productive with better surge control techniques, faster sand settling, separating and dewatering. Full three side overflow distributes water over a wider area, turbulence is reduced to a mere ripple, sand settles in a quiet pool area, while waste is flushed out smoothly and effectively.

The Osborn range of equipment is renowned for their ruggedness. They represent years of design improvements and field experience gleaned from crusher installations throughout the world.

This Classifier is used mainly for washing. The beaters or arms create a big turbulence in the pool area, to move the material around for better washing.

Telsmith do have a coarse material washer type Screw Classifier for the +10 mm to 50 mm material range.

Single Screw	CSS	2016	2019	2422	3025	2626	4832
Dia x length	mm	510x4880	510x5790	610x6700	760x6700	915x7620	1220x9750
Weight Empty	kg	2000	2160	3420	4275	5310	7650
Weight Full	kg	4950	5243	7965	10125	14715	23500
Motor	kW	4	4	7.5	11	15	15
Raking Capacity	tph	6 - 32	6 - 32	9 - 45	13 - 68	20 - 100	37 - 186

Water capacity when recovering - l/min							
Plus 100 Mesh		1857	1857	2122	2425	2994	6064
Plus 150 Mesh		948	948	1061	1213	1327	3032

Twin Screw	CDS	2016	2019	2422	3025	3626	4832
		510x4880	510x5790	610x6700	760x6700	915x7620	1220x9750
Weight Empty	Kg	3650	3900	6150	7700	8550	15300
Weight Full	Kg	4950	5243	5243	10125	14715	29250
Motor	kW	7.5	7.5	15	18.5	22	37
Raking Capacity	tph	13 - 64	13 - 64	18 - 90	27 - 136	40 - 200	103 - 364

Water capacity when recovering l/min							
Plus 100 Mesh		3714	3714	4245	4850	4889	9210
Plus 150 Mesh		1895	1895	2122	2425	2464	4624

Capacity indicates tph dewatered to a moisture content allowing good conveying characteristics on an inclined belt conveyor. Maximum allowable conveyor inclination 16°, with 15° or less preferable.

Water capacities shown are figured for classifier handling average concrete sand and with sufficient dilution to obtain a fairly clear overflow.

For overflows heavily laden with suspended silt and clay, reduce water capacities shown by 30%. Extremely slimy overflows may require dilution water added through wash water distribution.

For more detail and general arrangement drawings please contact our Sales Department at the numbers below.

Osborn. Designers and manufacturers of bulk materials handling and minerals processing plant and equipment.

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