

JASH “ROTOCLEAN” ROTARY DRUM SCREEN

APPLICATION:

“Rotoclean” is a mechanically cleaned fine screening equipment used to prevent fine sized floating wastes from travelling further into waste water treatment plants. “Rotoclean” screen is designed to screen out almost all the fine floating wastes such as plastic bags, pouches, sachets, paper wastes, cloths, condoms, weeds and various other fine fibrous wastes coming with wastewater or effluents.

CONSTRUCTION:

“Rotoclean” screen comprise of equally spaced wedge wire bars located radially and braced together by lateral reinforcement tie bars / punched sheet to form a drum. The screen is installed at an inclination of 35° with the open end of drum facing the water. The screen is provided with a waste collection trough located at its center and the trough is provided with a screw conveyor to transfer the waste to the discharge point.

WORKING:

Wastewater enters through the open end of the drum and the floating waste bigger than the bar spacing is retained on the inner surface of the drum while the screened water flows out from the sides and bottom of the drum. The rotating drum brings the captured waste to the top and a water jet mounted along the outer length of the drum pushes the waste on to the collection trough. The screw conveyor located in the trough is provided with an integral washing zone where a high pressure water jet washes the waste to remove any fecal soluble matter coming with wastes. A compaction zone is also provided to dewater the waste by squeezing before final discharge. This reduces the volume of waste to be transported as well as allows for more hygienic disposal of waste.

SALIENT FEATURES:

- Compact design-low space requirement - “Jash-Rotoclean” has many features built in to one system. Apart from the screening, the features of transportation, washing and compaction are integrated in to one resulting in to low requirement of expensive space.
- Easy installation - “Jash-Rotoclean” is supplied in completely assembled condition and dry tested from the plant and hence very low possibility of improper installation. Even single person can carry out complete installation and commissioning within 2 days.
- Low head loss - The installation of the drum at an inclination of 35° provides more screening area. This results in to low head losses.
- Lower risk of overflow - Since the drum is open only from side, the screenings always stays inside the drum only and do not overflow the channel even if the pollution load is high.
- Lower weight of screenings - Due to dewatering up to 40% dry residuals the screenings weight gets reduced by approximately 50% thus minimizing disposal costs.
- Very hygienic - Since the screenings are washed before finally discharged, the odor nuisance is very low.
- Low maintenance - “Jash-Rotoclean” has virtually no lubrication points. Only regular inspection and control is required to be done. Moreover the whole screen can be tilted and tipped out of the channel with suitable lifting mechanism for occasional cleaning.

SPECIFICATION:

Wire spacing / Perforation diameter	1 mm to 6 mm (0.04” to 0.24”) / 2 mm to 6 mm (0.08" to 0.24")
Drum diameter	600 mm to 2,000 mm (24” to 80”)
Suitable for channel width	800 mm to 2,200 mm (32” to 88”)
Suitable for channel depth	600 mm to 2,000 mm, (24” to 80”) larger depth on request
Material of construction	Stainless steel 304, 316, other materials on request



“Rotoclean” Drum Screen for Pattaya STP, Thailand



Waste Collection Trough



Cleaning Brushes



Spray Nozzles