

JASH SUSPENDED TRASH RAKE SCREEN

APPLICATION:

Suspended trash rake screen is mechanically cleaned coarse screening equipment used to prevent large sized undefined floating wastes from entering into the intake structure of a pumping station. Manual cleaning of trash rack is a time consuming and laborious activity and can be avoided by using Mechanized suspended trash rake screen that can automatically clean screen areas as large as 300 sq. meters (990 sq. feet) within 2 hours.

CONSTRUCTION:

Suspended trash rake screen comprises of equally spaced screen bars starting from the invert of opening and extending up to the top of water level at an inclination of 80° and covering the entire width of intake structure. A grab, suspended above the platform on a carriage which travels on a track running parallel to the screen, is then used to clean the screen.

WORKING:

The grab travels down from its home position in open condition with bottom portion getting engaged with the bars and then moves down the bars pushing the waste till the bottom. The grab closes upon reaching the bottom and traps the waste into its enclosure. Thereafter it starts traveling upwards towards the carriage and once the grab is out of the water, the carriage travels laterally on the track to discharge the grabbed waste in to a disposal bin. The carriage with its grab laterally shifts on the screen after each cycle and in this manner cleans the entire screen width.

The operating mechanism remains un-submerged and is accessible on platform for operation and maintenance checks. As a result, no isolation equipment (gate / stop logs) is required to be installed before these types of screens.

SALIENT FEATURES:

- Fully automatic - No manual labor involved.
- Ease in maintenance - Operating mechanism (Grab) remains un-submerged and easily accessible on platform.
- No need of isolation gates / stop logs.
- High efficiency- Can clean area as large as 300 sq. meters (990 sq. feet) within 2 hours.
- Possibilities of using 2 numbers grab to achieve faster cleaning.

SPECIFICATION:

Bar spacing	50 mm (2") and above
Channel depth	2,000 mm to 10,000 mm (80" to 400")
Channel width	1,000 mm to 40,000 mm (40" to 1600")
Material of construction	Carbon steel / Stainless steel 304, 316, other materials on request



Suspended Grab Basket



Movable Carriage with Grab



Carriage Maintenance Station with Control Panel



40 m (132') wide Suspended Grab Screen at 60 Cumecs Capacity Haji Ali Storm Water Project, Mumbai, India