Mechanically Cleaned Bar Screens
Triveni Mechanically Cleaned Bar Screens assure positive, efficient screening for any flow condition. Backed by decades of experience, Triveni Screens provide the efficiency, economy and dependability that means lowest overall cost. Numerous installations in industrial and municipal applications are proof of unmatched Triveni performance, unsurpassed quality.

Triveni Screens for channel installation are available in two variants:

- Chain operated Bar Screens
- Cable operated Bar Screens

Within the above basic styles, there is a wide range of sizes to exactly suit any condition e.g. flow, channel size, liquid depth, length of screen centers etc.

**Chain Operated Bar Screen - Features**

- Completely assembled in our shop to ensure correct fit at site. Larger screens are shipped in major sub-assemblies, duly matched marked for easy field assembly.
- Front cleaning design for maximum screening efficiency with no possibility for rake teeth to slide over screenings accumulated on the bar.
- Rugged Chain drive for adequately designed head shaft.
- Totally enclosed head shaft housing
- Accurately formed teeth effectively clean front & sides of the Bars.
- Rugged side frame housing steel chain guides on carrying and return runs.
- Adequately designed steel bar rack alongwith deck plate is rigidly attached at both ends.
- Foot shaft sprockets are fitted on adequately designed carrying idlers for trouble free operation under water and gritty conditions without external lubrications.
- Drive Shear Pin arrangement provided for mechanical safety of the unit under excessive overload condition.
Mechanically Cleaned Bar Screen

- Efficient Cleaning

Cable Operated Bar Screen

This design of Triveni Screen is ideal for screening service where the volume of screenings to be removed is small and channel depths are moderate. The screen offers benefits such as Front Cleaning, Rigid Bars and Dead Plate construction available in Chain Operated design. The screen is cleaned by a single rake which is mounted in a carriage assembly. The carriage is raised and lowered by two pairs of cables operating from drums mounted on a common head shaft. A designed-in slippage between the drums produces a change in the relative length of each cable pair.

This action takes place at the top and bottom of the carriage travel and causes the rake to swing away from or up against the bar rack and dead plate. The rake swings into the bar rack engaging the teeth with the bars at the bottom of the channel. Channel guides retain the rake carriage maintaining proper contact of the rake teeth with the bar rack for maximum cleaning efficiency.

After clearing the bar rack and dead plate, the rake discharges the screenings on a chute. A rake wiper positively cleans the rake and a counterweighted hinged plate keeps the screenings from falling back into the channel. After the rake is cleaned, the drive reverses, swinging the rake away from the dead plate. The rake is then returned to the channel bottom.

The head section of the screen is completely shop assembled, shipped as a unit, saving installation time and assuring proper operation. Protective devices included with the screen are a slack cable switch, over travel limit switch and drive shear pin.

Controls

Triveni Screen is normally recommended to be operated through a Control Panel.

- Operation of the rake can be controlled by a float switch or a time clock through adjustable timers.
- While both the cycles are provided, time cycle over-rides the level differential cycle if the level differential does not build-up within a pre-determined time period.
- Wherever required, control scheme include interlock with conveyor to ensure that screen starts only after the conveyor is in operation.
- Options available for operating manually through the electrical push button station or fully automatic operation through PLC/SCADA etc.
Wide Range of Equipment for Intake Works

Chain Operated Mechanical Bar Screen
Cable Operated Mechanical Bar Screen

Trash Cleaning Machine
- Fixed type
- Traversing type

Travelling Water Screen
- Thru Flow
- Dual Flow

Trash Racks
- Drum type Microscreen
- Stoplog Gates