TRAVELLING GRAB TRASH RAKES



PURPOSE

- The travelling grab rake is used to remove the debris arrested in water intakes of the multi-pass bar rack layout or intakes with a wide bar rack front.
- It is designed to handle large quantities of small or medium size debris (weed, grass, twigs, etc.).

DESCRIPTION

- One or more inclined bar racks are installed side-byside (15° incline) at the plant inlet
- On deck, a gantry rail supported by a set of vertical posts, follows the edge of the deck
- The carrying trolley runs on the gantry rail. It is fed by a festoon cable system which also runs on the gantry rail
- The rake has three cable drums: two to lower and lift the rake, one to open and close the trash collector
- When the rake is started, it travels down and along the bar racks, the rake itself having engaged the bars. Debris are removed and stored in the trash collector. When reaching the bottom, the trash collector closes, travel is reversed, and the debris brought up above deck
- ◆ The rake assembly then travels along the rail to the side discharge point where the collector opens and drops the debris (on deck or in a container)
- The rake is designed to clean each bar rack pass in turn or the specific line number, in case of head-loss signal.

ADVANTAGES

- Fully automatic
- Easy to install, no grouted wall guides
- Sturdy and reliable
- Large debris-handling capacity
- Keeps the deck clear of rails and obstruction
- Neat debris discharge and collection
- High travel and raking speeds
- Numerous safety features.
- Full electronic control



OPTIONAL FEATURES

- Differential level measuring system
- Trash containers
- Atex qualification



NECESSARY ANCILLARIES

- PLC control cabinet
- Manual control override
- Trash collection system

MATERIALS

- Bar rack, rake, debris collector: for fresh-water applications: painted carbon steel or AISI 304L stainless steel; for seawater applications: AISI 316L stainless steel with anodes, duplex or super-duplex stainless stee
- Cable drum: for fresh-water applications: carbon steel; for seawater applications: AISI 316L stainless steel
- Top gantry rail and posts: painted carbon steel or galvanized carbon steel
- Rake tines, rollers: polyamide
- Bolts and nuts:for fresh-water applications: A2 stainless steel; for seawater applications: A4 stainless steel, duplex or super-duplex stainless steel

SIZE AND DATA

- Comes in one width to fit all cases
- ◆ Bar spacing from 30 to 80 mm (1 ¼ to 3")
- Bar rack incline: 15°
- Tidal variation no limit in practice



