

# PLATE-SUPPORTED DRUM SCREEN



## PURPOSE

- ◆ This plate-mounted, self-supporting drum screen is used to screen small or medium flows of water for industrial or water-treatment plants
- ◆ It is a fully standardised design and is not designed to be customized. It is meant for sites with little or no level variations

## DESCRIPTION

- ◆ The drum screen consists of a cylindrical screening belt which separates the screen chamber in two specific areas.
- ◆ Water flows from the outside of the screening mesh towards the inside.
- ◆ A mobile sealing device is installed on the rotating part so as to tightly separate the raw and screened water.
- ◆ Debris retained by the screening mesh create head-loss. The head-loss is monitored and used to control the operating cycles at predetermined levels.
- ◆ Debris are removed from the screening mesh by a forceful spray-water system (from inside the drum screen to the outside). They are evacuated via a debris trough on deck level.
- ◆ Head-loss creates a lifting force which helps float the drum screen thereby making rotation easier and resulting in less load on the bearings

## OPERATION

- ◆ The drum screen operates automatically. The washing cycle is triggered off by:
  - ◇ The associated head-loss indicator
  - ◇ A timer device
- ◆ Manual intervention
- ◆ Operating sequences are as follows:
  - ◇ High speed operation at first head-loss level
  - ◇ Alarm at second head-loss level
- ◆ Stop-pump signal at third head-loss level



## EQUIPMENT DATA

### MAIN APPLICATIONS

- Raw water filtration for water-treatment plant
- Irrigation
- Cooling tower outlet filtration

### WATER TO BE SCREENED

River/lake water – residual water – drinking water-seawater

### FLOW RATE

Up to 2000 m<sup>3</sup>/h per drum screen

### SCREENING MEDIUM

From 0.5 mm to 10 mm

### MAXIMUM ADMISSIBLE WATER LEVEL VARIATION

0.5 m

### HEAD-LOSS DURING OPERATION

From 0.5 (minimum) to 25 cm H<sub>2</sub>O (maximum) in normal operation

### MBACKWASH SPRAY CLEANING

Spray-water pipework in upper part of drum screen  
Water and debris discharge in appropriate trough. Washwater pressure : 3 bars

### FLOW PATTERN

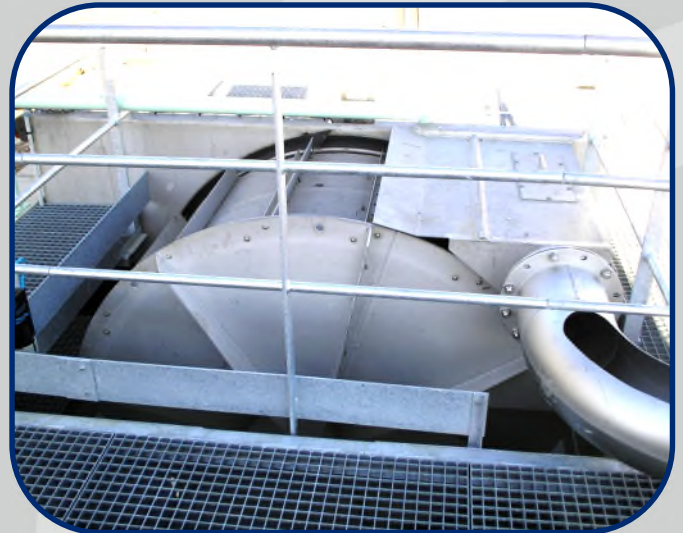
From outside to inside

### UPSTREAM PROTECTION

Bar racks – trash rakes

### SPECIAL COMPONENTS

Cathodic protection (sacrificial anodes or impressed current).  
Head-loss monitoring systems. Electrical control panel

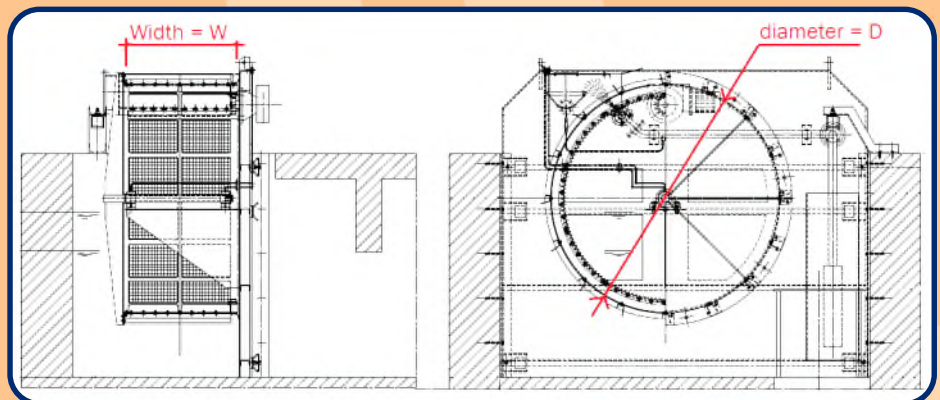


## MATERIALS

- ◆ AISI 304L Stainless Steel for fresh water applications
- ◆ AISI 316L, Duplex, Super Duplex Stainless Steel for seawater applications

## SIZE

- ◆ Available width: 0.8, 0.9 and 1.0m
- ◆ Available diameter: 1,5m or more upon request



Contact us for a quote at  
[www.beaudrey.com/contact](http://www.beaudrey.com/contact)