

Flo-Drum MBR

Pre-Treatment Screen
VSA-M

SAVI



Six FD-MBR2000 10 MGD Per Screen - Brescia Italy

SAVI Flo-Drum MBR Pre-Treatment Screen

Protecting Membrane Bioreactors Worldwide



Three - FD-MBR2000 5 MGD Per Screen - Orleans, France

The Enviro-Care Flo-Drum MBR Pre-treatment Screen is a fine screen with the high capture efficiency and minimal by-pass features that the sensitive MBR process requires.

The rotating drum, cleaning brush and water spray ensure that a clean screen surface is always available to meet the incoming wastewater flow. Screenings captured on the drum surface are immediately swept into the auger trough and moved out of the screening zone.

This MBR pre-treatment screen is an excellent retrofit option. Below, two Flo-Drum MBR in tank screens are pre-treating flow from a primary clarifier prior to a membrane bioreactor process.



Two FD-MBR1600 6 MGD Per Screen - La Center WA U.S.A.

Over 200
Drum Screen
Installations
Worldwide



Three FD-MBR1400 3 MGD Per Screen - Trento Italy



6 - Exterior Brush



8 - Bottom Bronze Bushing



11 - Clean, Dry Screening Area



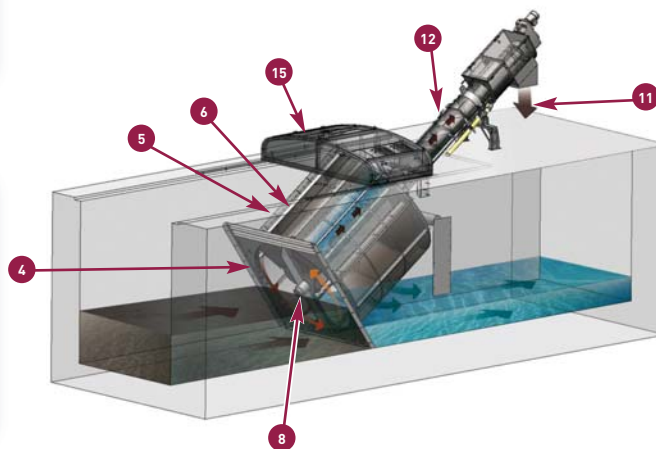
5 - Overlapping Spray Pattern



12 - Flo-Drum Units with freeze protection in Washington State



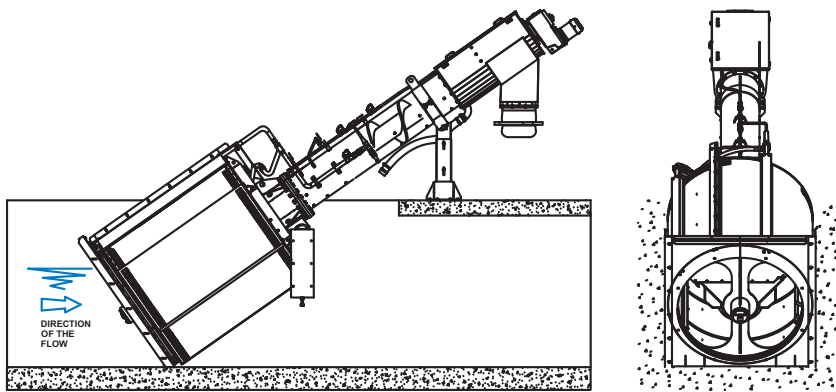
4 - Triple Face Seal



15 - Removable, Sliding Aluminum Covers

Features & Benefits

- 1 **The Flo-Drum screens, conveys, washes and dewater screens all in one unit** - Eliminates the need for multiple pieces of equipment.
- 2 **Flo-Drum units are available for in-channel or in-tank applications** - Same efficient operation for either gravity or pumped flows.
- 3 **Flo-Drum screening systems have three separate washing functions** - The unit is designed to wash organics from the screenings and be self-cleaning at the screen basket and in the dewatering zone.
- 4 **Proprietary triple face seal** - Designed in conjunction with a major MBR manufacturer for maximum capture efficiency of fine solids including hair and to prevent bypass.
- 5 **Spray nozzles on the outside of the screen basket produce an over lapping spray pattern** - More efficient cleaning of screen basket and better capture of small solids.
- 6 **A cleaning brush on the exterior of the screen keeps solids contained within the screening basket** - Prevents small solids from passing through the screen and maintains a clean screen surface for the incoming flow.
- 7 **Durable brush is attached to the spiral at the auger trough** - Even the smallest solids are swept into the auger trough for removal.
- 8 **Large, robust, self-lubricating bronze bushing** - No lubrication pumps or maintenance required.
- 9 **Common drive operates the rotating screen basket and screw conveyor** - Synchronized operation for lower energy consumption and less maintenance.
- 10 **Hinged and latched compaction zone access with safety interlock switch** - Provides ease of access with no tools required yet prevents opening during operation.
- 11 **Screenings are completely enclosed within the transport tube and dewatering zone** - Creates a cleaner, drier screenings area with reduced odor. Optional bagger is available.
- 12 **Optional freeze protection is available** - Screens are easily adaptable for outdoor installations in colder climates.
- 13 **Screening drum is available in perforated plate or mesh screen media** - Custom engineered to meet specific application requirements.
- 14 **Exceptional design, durable construction** - Designed for high capture efficiency and years of reliable operation.
- 15 **Removable, sliding Aluminum covers** - Covers slide open and out of the way to perform routine maintenance or to pivot the unit out of the channel.
- 16 **Optional Stainless steel cover design available** - A cover alternative based on customer preference.



Specifications

| | | |
|-------------------------------------|---------------------|---|
| Flow rate | mgd | 1 - 30 |
| Channel widths | inches | 26 - 118 |
| Opening for MBR applications | mm perforated media | 1 - 2 - 3 |
| Angle of inclination | | 35° |
| Drum screen OD | mm | 600 - 800 - 1000 - 1200 - 1400 - 1600 - 1800 - 2000 - 2200 - 2400 - 2600 - 3000 |
| Drive motor | Hp | 1 - 1.5 - 2 - 3 - 5 |
| Controls | | NEMA 4X/7 |
| Voltage | V-Hz | 240/480 V - 60 Hz |

Materials of Construction

| | |
|---|---|
| Shafted screw | ST52-3 Alloy Steel (304/316 SST Optional) |
| Supports, End Plates, Anti-rotation bars | AISI 304 SST (316 Optional) |
| Tubes and Discharge Chutes | AISI 304 SST (316 Optional) |