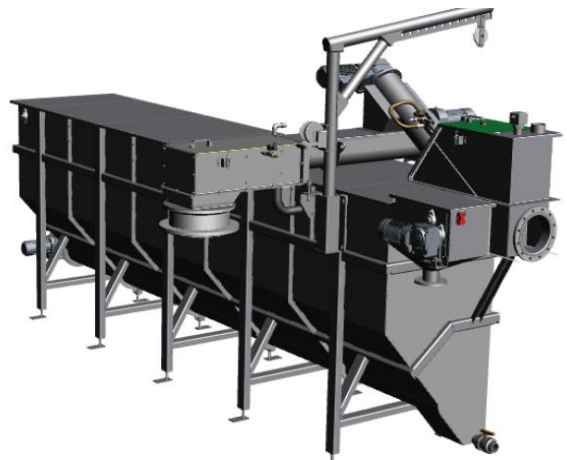


PRETREATMENT COMPACT UNIT : SCREENING, SAND REMOVAL, FAT REMOVAL

SPECIFICITIES

- > Compact and modular closed unit
- > Installation and commissioning: 3-5days
- > No civil-work (slab only)
- > Lower capital and maintenance costs



DESCRIPTION / OPERATION

○ APPLICATION

The compact pretreatment unit ENVIROSTEP are designed for urban and industrial raw effluents. Such simple and efficient solution fits perfectly with projects looking after minimizing the concrete and reducing the pretreatment operating costs of urban and industrial sewage treatment plants.

○ DESCRIPTION

The compact pretreatment unit ENVIROSTEP are machine-welded in stainless steel with three functions, screening, sand removal, and fat removal of raw effluents. ENVIROSTEP units are designed to accept flows from 10 up to 500 m³/hr, but several units can be installed in parallel to accept flow variation due to seasonality or to higher flow. An efficient screening is performed with a SPIRASCREEN adapted to each model. Sand and fat removal is performed inside a longitudinal tank in continuation to the screening phase.

○ OPERATION

◆ Screening and compacting

The solids are retained by the grid and then extracted and conveyed by the screw to the compaction zone. The compaction can be integrated into the screening machine, or carried out by an ENVIROPRESS transversal compactor equipped with an innovative and specific back pressure system to adjust the dryness.

◆ Sand and fat removal

The bubbles formed by an air insufflation ensure the separation of the fat by flotation and separate the organic materials stuck to the sand. The sand and fat removing tank is designed by modules of identical lengths. This modularity offers a great flexibility. It is thus possible to vary, at the origin or later on, the length of the tank to adapt to the desired hydraulic speeds.

◆ Sand extraction

The decanted sand is collected by a first horizontal screw installed at the bottom of the tank, and is transferred to an extraction and draining screw for evacuation towards storage systems before final disposal.

◆ Fat Extraction

The extraction of fat takes place over the entire length of the machine by means of a longitudinal box. The accumulation of fat in this zone is favored by the movement created by the insufflation of air. The fat is recovered and evacuated by a surface scraper.

TECHNICAL DATA

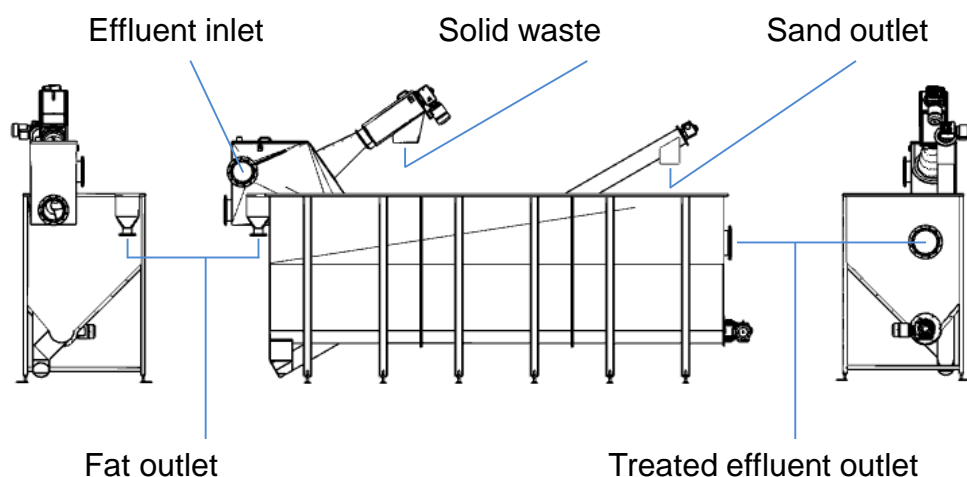
MATERIAL

- Construction in stainless steel 304L or 316L
- Screw in special steel high resistance

PERFORMANCES

Flow rates (m ³ /h)							
EVS3-40	EVS3-70	EVS3-100	EVS3-150	EVS3-200	EVS3-300	EVS3-400	EVS3-500
40	70	100	150	200	300	400	500
Sand capture rate: 90% > 200 microns							

LAY-OUT AND DIMENSIONS



	Overall dimensions in mm							
Model(*)	EVS3-40	EVS3-70	EVS3-100	EVS3-150	EVS3-200	EVS3-300	EVS3-400	EVS3-500
Length	2800	4800	6800	6800	8800	10800	10800	12800
Width	1100	1100	1100	1500	1500	1500	2000	2000
Height	3300	3300	3300	4100	4100	4100	4800	4800

(*) EVS3 = design with three functions included, version with 2 functions only, also available with combination of Sand and Fat removal only or Screening and Sand removal only under EVS2 denomination.

The manufacturer reserves the right to make technical and manufacturing modifications without prior notice.
Not all installation possibilities and combinations are indicated. Please consult us.