

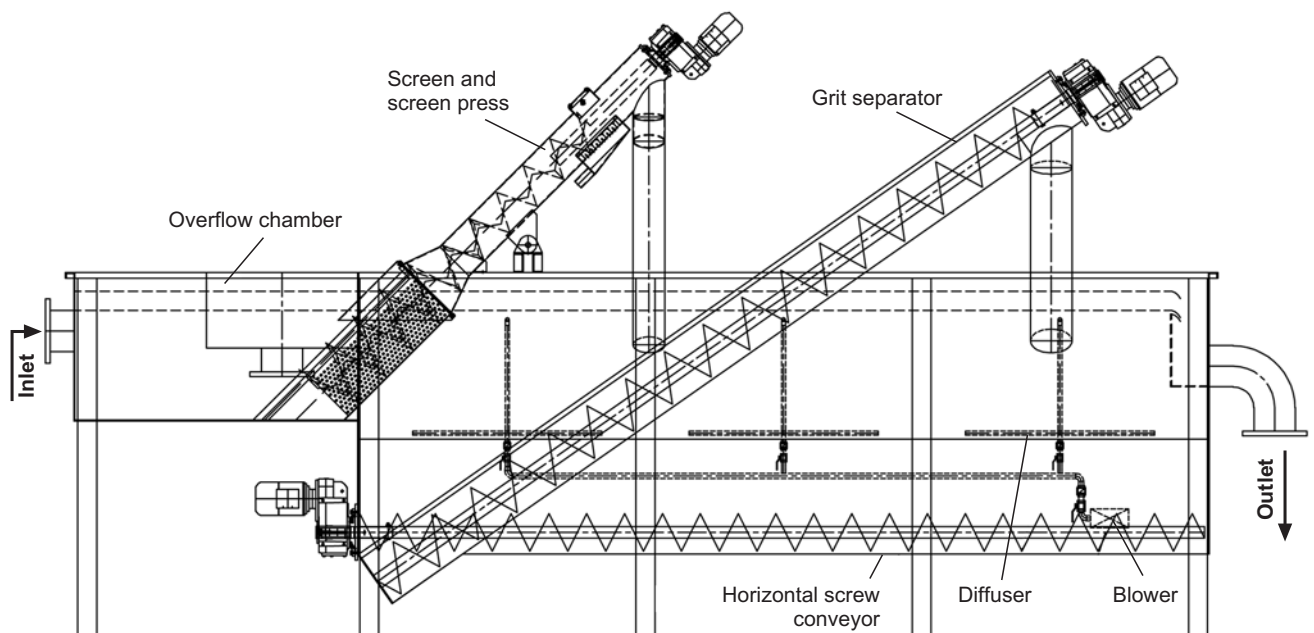
# SCREENING AND DEGRITTING UNIT

This unit is a compact system which is developed in order to separate large materials, grit and grease from municipal and industrial wastewater. Compact system provides separation of particles with high efficiency. It requires less maintenance and it is easy to operate.

## Operation principle

First, wastewater goes through the screen and then flows into the grit removal tank. Screenings that are captured by the sieve are pressed by screen press which is integrated with screen and discharged from discharge pipe. In grit and grease chamber, grit settles to the bottom of the tank and grease moves upwards to the surface of the tank. Settled grit is pushed to hopper by horizontal screw conveyor that is located at the bottom of the tank.

In order to prevent organics settling, wastewater is mixed by air supplied by blower-diffuser system. Diffusers are located at bottom of the tank. Collected grit is dewatered and discharged by a screw type grit separator. Grease is discharged from the grease section via grease skimmer or weir system.



Screening and degrading unit consists of following main parts;

### Screen

The screen is a compact equipment which includes sieve, screw type screen press and discharge chute. It is made of stainless steel.

### Grit and grease removal tank

It is a rectangular tank which is made of carbon steel or stainless steel. Tank is divided into two section as grit and grease chamber. Grit chamber has a horizontal screw conveyor to carry settled grit to hopper, a screw type grit separator to separate grit and water, diffusers to provide air for mixing.

Grease chamber consists of grease removal equipment and grease box.

### Horizontal conveyor

A screw type conveyor is located at bottom of the tank and manufactured from stainless steel.

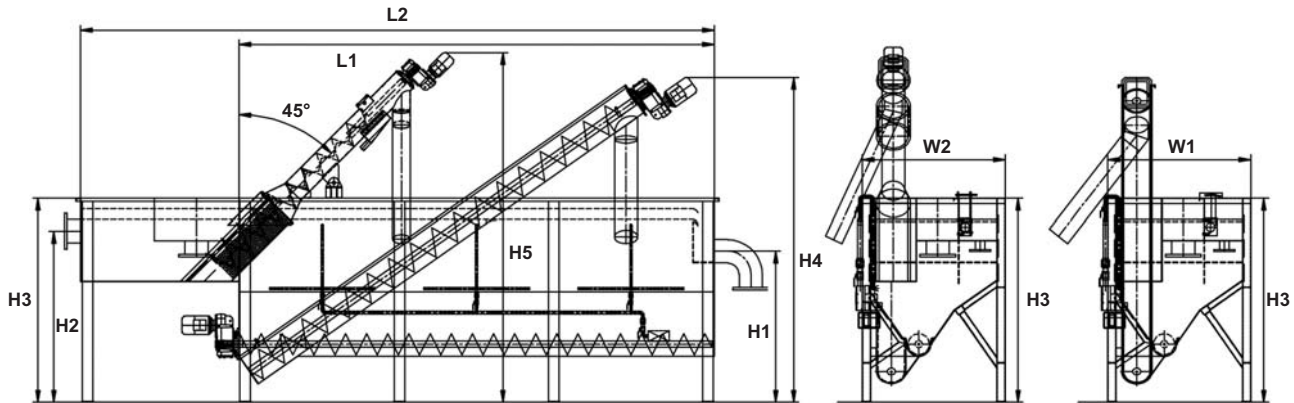
### Grit separator

It is used to separate grit and water and discharge separated grit from hopper. It is consisting of a tube, a screw and a discharge chute.

### Grease removal and discharge unit

Skimmer, adjustable weir or slotted tube can be used to remove grease and other swimming material depending on client's preference.

# SCREENING AND DEGRITTING UNIT



Capacity Q (m³/h)															
Model \ L1 (m)	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11
<b>CSG800</b>	47	54	58	65	72	80	83	90	94	101	108	115	122	126	133
<b>CSG1200</b>		111	126	137	153	165	180	198	209	225	238	266	266	277	295
<b>CSG1400</b>							252	270	285	305	325	380	360	380	400

\*Above capacities are according to capture rate 90% for 0,2 - 0,25 mm diameter grit.

Dimensions (mm)										
Model		W1	W2	L1	L2	H1	H2	H3	H4	H5
<b>CSG800</b>	Without grease section	800		From table1	L1+1500	1430	1620	1925	3070	3350
	With grease section		1200	From table1	L1+1500	1430	1620	1925	3070	3350
<b>CSG1200</b>	Without grease section	1200		From table1	L1+1500	1880	2080	2375	3570	3755
	With grease section		1600	From table1	L1+1500	1880	2080	2375	3570	3755
<b>CSG1400</b>	Without grease section	1400		From table1	L1+1500	1880	2080	2375	3570	3755
	With grease section		1800	From table1	L1+1500	1880	2080	2375	3570	3755

