

BAR SCREEN HEAVY DUTY RANGE - DCV-T series

Leader in the design and the manufacturing of sludge treatment systems for drinking water, waste water and sludge, EMO is present in 5 continents of the globe and holds more than 2500 recommendations to its credit since the company's creation in 1985. The DCV-T range of screens is a heavy duty design which removes coarse suspended solids from waste water.

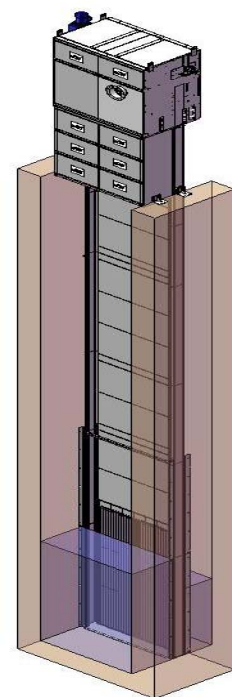
This kind of screens can be used for many applications:

- > Pumping and lifting stations (irrigation, flood control, rain sewerage network)
- > Water intakes (cooling water for power plants and refineries)
- > Hydro electrical plants
- > Municipal waste water treatment plants
- > Drinking water plants
- > Industrial water processing

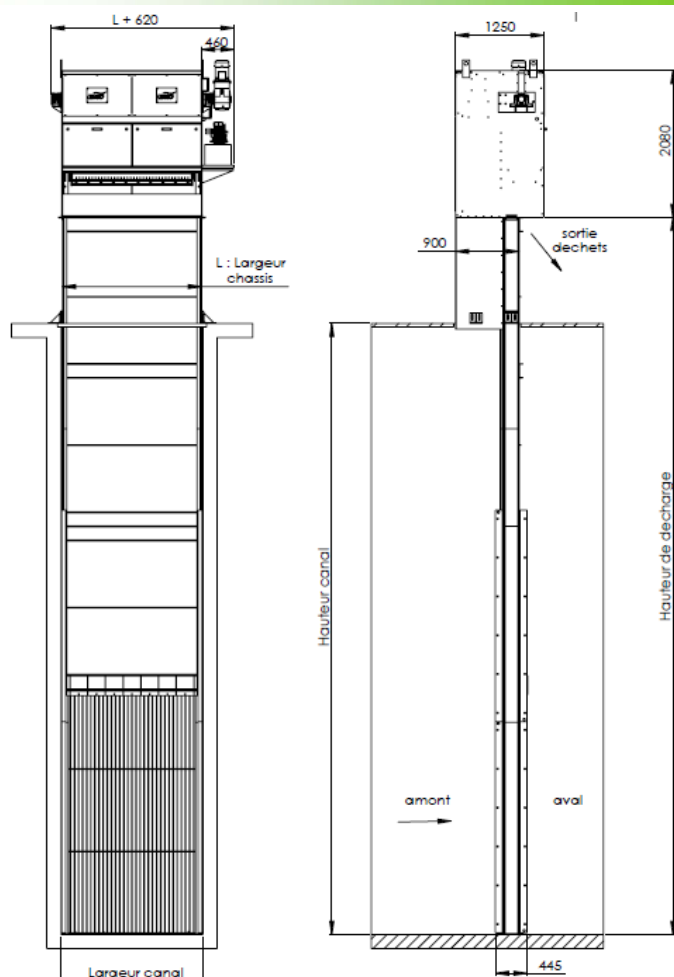
Among the several screens technologies on the market, key differences are the lifting capacity of the rake and the size of the screenings that the screen is able to lift.

The cable operated screen has many advantages over other technologies:

- > No critical mechanical parts in the water
- > The rake is opened in front of the bar rack by means of the central cable to catch bigger screenings,
- > The lifting capacity per cycle is very high (up to 1 ton solids per raking)
- > The rake can stop and open at any position along the downwards movement which is a big advantage in case of storm, flood ... conditions)



Technical data



Description	Position	Dimensions (mm)
Overall screen height		2600 minimum
Discharge height from channel bottom	Hd	1600 minimum
Channel width **	Lc	1500 - 6000
Grid (bar rack) height	Ld	500 minimum
Channel depth **	Hc	1000 minimum à 25000
Discharge height from operation floor		600 minimum
Bar spacing		10 -100 mm

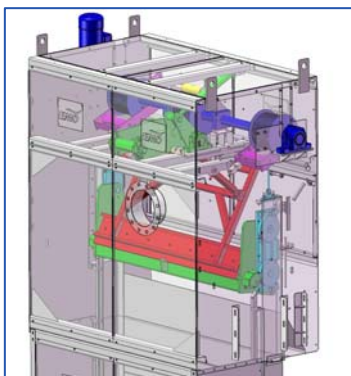
** other depth or width, please ask for tailor made solution



Operating principle

Head of the screen

with mechanical components (jacks, end limit switches, driving shaft, rake lift, cable slackness).



The DCV-T is fitted with **3 cables** : one on each side for the upwards and downwards movement of the rake, and one central cable for the closing and opening of the rake.

The cables roll and unroll on **multigroove drums** to allow longer life time. In the home position, the rake is located at the top. When cycle starts, the rake opens and starts to move downwards on the guiding rails. When the slack cable sensor is actuated, the rake closes to penetrate inside the bars and catch the screenings. Usually, the rake closes at the bottom of the position on the descent to catch floating materials.

The screening is lifted inside the bucket, created by the rake, the rake holder and sliding against the dead plate (or concrete wall). When reaching the top, the screenings are discharged by means of ejector actuated by jacks and fall down directly into container or conveying system for an efficient operation and screening removal, the water speed through the screen should not exceed 1 m/s.

Mechanism in the top part protected by stainless steel covers



Screenings ejector actuated by 2 jacks



Downwards movement
Rake opened



Upwards movement
Rake closed

Installations

