

## INCLINED BAR SCREEN -DCI 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 DCI bar screen is a mechanical fully automatic screen used for liquid/solid separation in the pre-treatment stage of wastewater treatment plants, pumping station ...

This very particular screen can be used as a coarse screen using grids but also as a fine screen or sieving system by using perforated plates or wedge wire type grid.

✓ Multirakes & double chains driven screen

✓ Mounting position: inclination 60°

✓ Fineness of screening from 0,50 to 50 mm

✓ High capacities up to 3500 m<sup>3</sup>/h

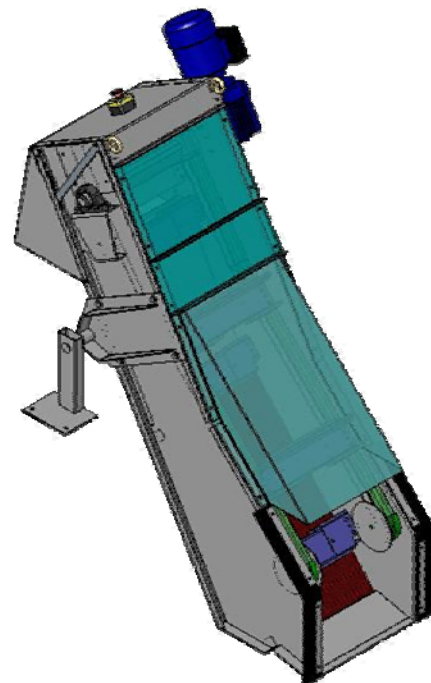
✓ Very low maintenance, no critical parts in contact with water and small space constraints

✓ Material: stainless steel 304L as a standard (available in stainless steel grades)

✓ Automatic operation

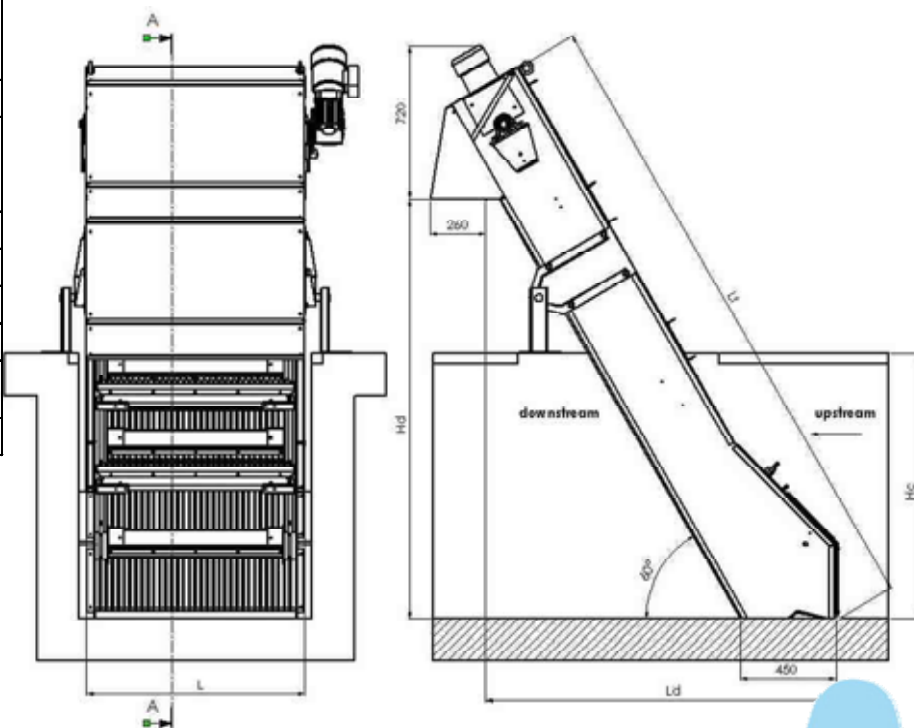
✓ Smart, sturdy & safe design – no risk of blocking

✓ Very wide range of application - easily convertible from coarse screen to fine screen



### Technical data

Description	Position	Dimensions (mm)
Overall length	Lt	2000 to 12000
Discharge height from channel bottom	Hd	1100 to 9780
Discharge length	Ld	1150
Channel height	Hc	
Screen width	L	430 to 2030
Effective width		350 - 1950
Discharge height from operation floor	HD	400 to 6800
Overall height		1820 to 10500



## Operating principle

The inclined bar screen starts and stops automatically according to the water level difference between upstream and downstream by means of level sensor or by timer clock.

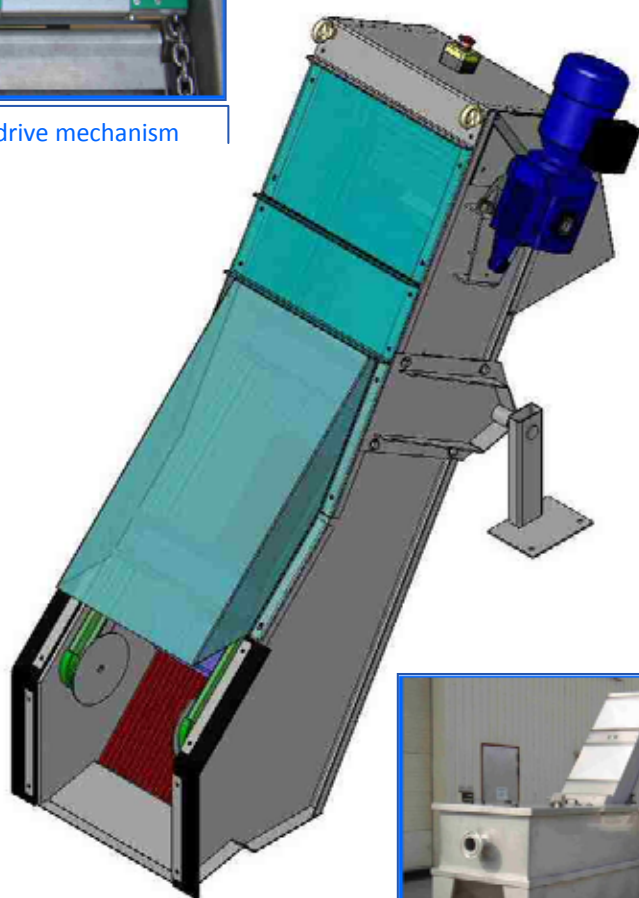
The bar screen includes a screen frame, a bar rack (grid) a back dead plate, a series of chain driven rakes and a drive unit. All bearings and critical parts are above liquid level at all times to facilitate lubrication and improve machine life. The number of rakes depends on the screen length and type of effluent.

When the screen is started, the 2 chains on the sides pull the rakes towards the top of the screen. When passing in between the bar rack, the rakes collect the screenings waste and lift them to the top where an ejector system pushes the screenings waste into the conveying or compacting system.

A back dead plate prevents the screenings to fall down on their upraise.



Rake drive mechanism



2 screens with integrated screw compactor



Screen mounted



Bottom plate

The heavy duty chain type has been selected for long life, maintenance free and prevents from any blocking as it is never tensioned.

The screen is fully covered and the height of the bar rack can be adapted to any requirement.

The rakes are easily replaceable and guided by means of HDPE blocks on the side.