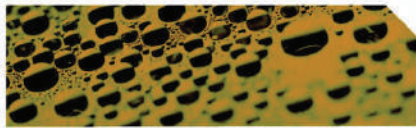
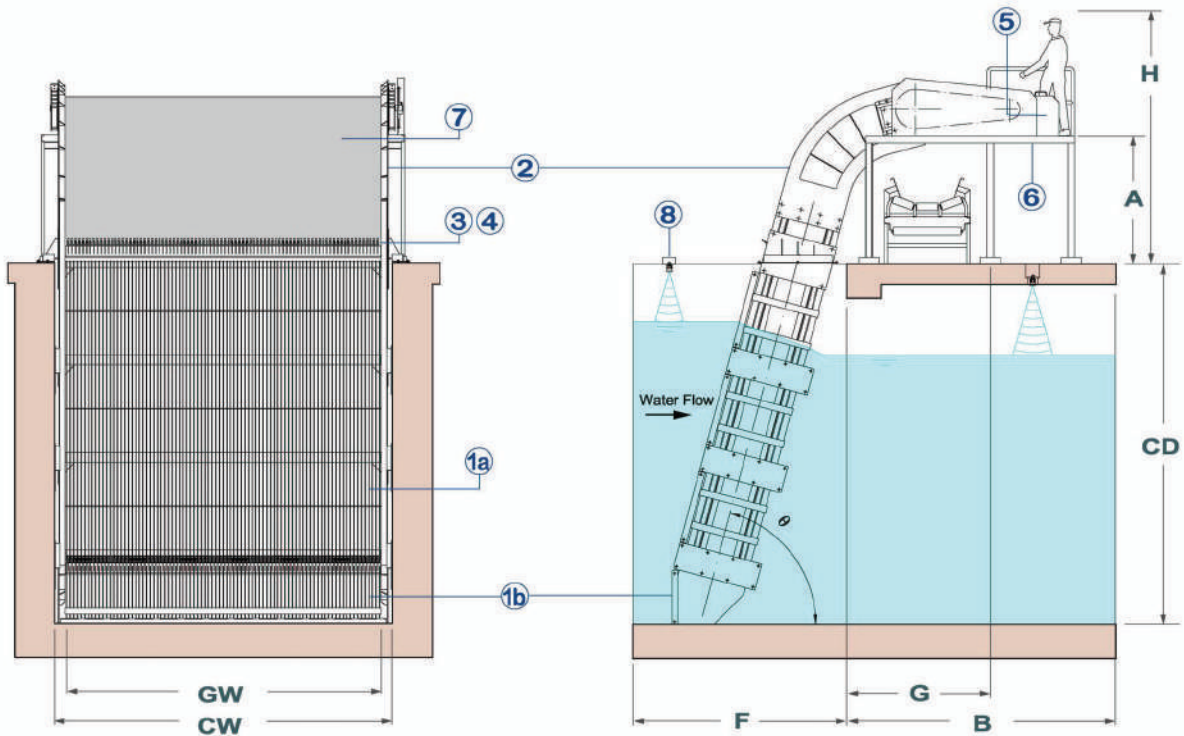


THE GREEN EARTH



Traveling Bar Screen

Typical installation ➤



- ①a— Rack
- ①b— Auxiliary rack
- ②— Frame
- ③— Tine
- ④— Traveling chain
- ⑤— Driving unit
- ⑥— Operation platform
- ⑦— Dead plate
- ⑧— Level differential detector

- A** = Height of platform
- B** = Maintenance space
- CW** = Channel width
- GW** = Rack width CW-0.32m
- CD** = Channel depth
- H** = Roof clearance ~ 4m
- G** = Screening moving access =1.8~2.1m
- θ = Equipment inclination
- F** = Minimum length required for installation

Application ►►

Traveling bar screen is a fully automatic, continuously debris removal equipment.

It is designed to remove great quantity of debris in water channel, the equipment can be used in inlet channel of wastewater treatment plant or pumping station,

Construction ►►

1 Construction

A. Main rack

Main rack is consisted of ample size flat bar with supporting beams. The sufficient strength of beams and bars were required to resist the maximum water pressure during the flood period. The installation angle shall be 75° approximately.

B. Auxiliary rack

Auxiliary rack is installed on channel bottom in front of the screen to prevent the debris from passing through the screen bottom. The opening of auxiliary rack shall be same as main rack, the installation angle shall be 90° .

C. The water pressure and sectional dimensions of racks can be designed per customer request, the maximum flow velocity passing through the racks shall be less than 0.8M/sec.

2 Frame

A. The frame shall be made of H beam and steel plate by welding or bolting, the sufficient strength and rigidity were required.

B. The guide rails fortines moving were made of stainless steel.

C. The safety net or cover can be provided per customer request.

3 Tine

A. The number of tines shall be designed per channel depth and debris quantity.

B. The total tine length shall be 350mm, the proper shaped tip can penetrate into rack opening for debris removal.

4 Traveling chain

The traveling chain is made of corrosion resistant and friction resistant materials, pitch shall be 6 inches.

5 Driving unit

A. The driving unit is consisted of motor, coupling, reducer, roller chain and output shaft.

The direct coupling can be designed per customer request.

B. The moving direction can be reversed by reversible motor. A chain tightener is furnished to adjust the tightness of driving chain. A Shear pin is furnished between output shaft and sprocket to prevent the overloading of driving unit.

The option mechanic overload protector can be provided for direct coupling design.

C. The safety guard or cover shall be provided on all moving parts.

D. Power requirement.

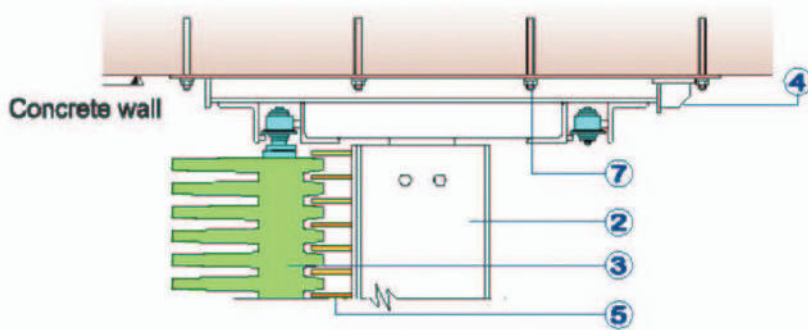
Tines NO.	Channel width (m)					
	1	2	3	4	5	6
2	0.4	0.75	1.5	1.5	1.5	2.2
4	0.75	1.5	2.2	2.2	3.7	3.7
6	1.5	2.2	3.7	3.7	5.5	5.5

(Tine lifting capacity 100 kg/M, moving speed 5m/min)

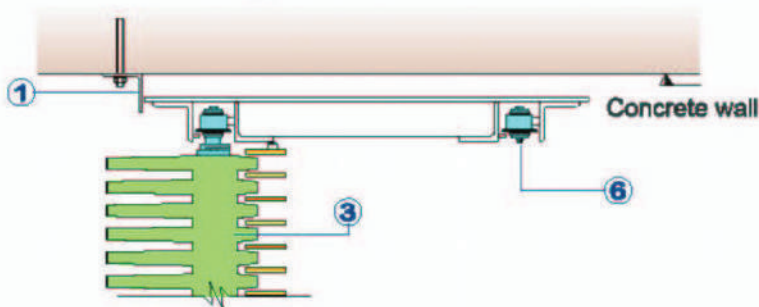


Details of installation ►

Rack and supporting beam ①

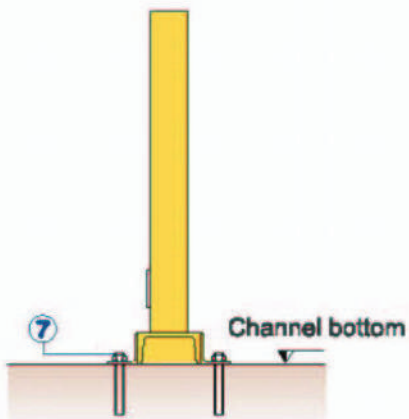


Influent Baffle ②

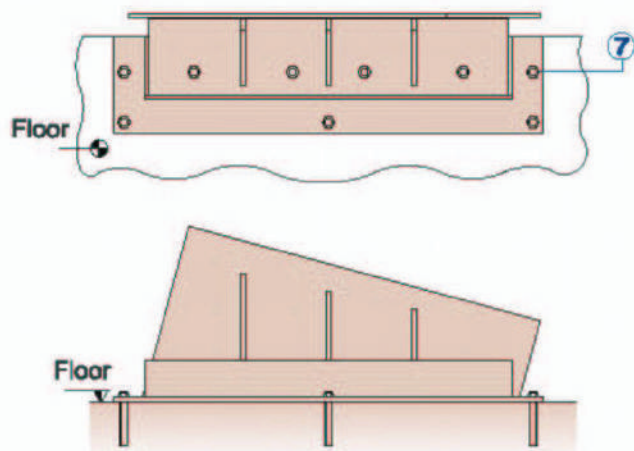


- ① Influent Baffle
- ② Supporting Beam
- ③ Tine
- ④ Bracket
- ⑤ Rack
- ⑥ Chain and guide rail
- ⑦ Chemical Bolt

Auxiliary Rack ③

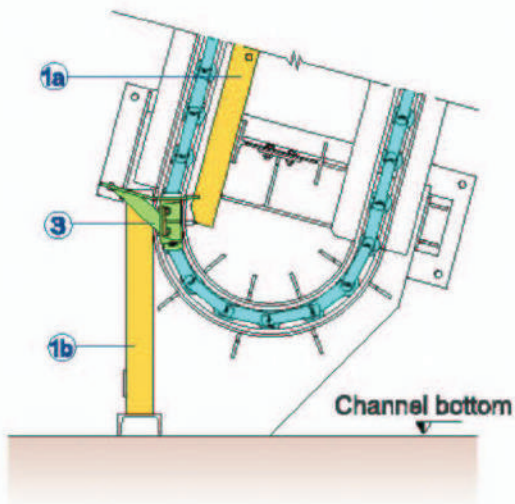


Frame ④

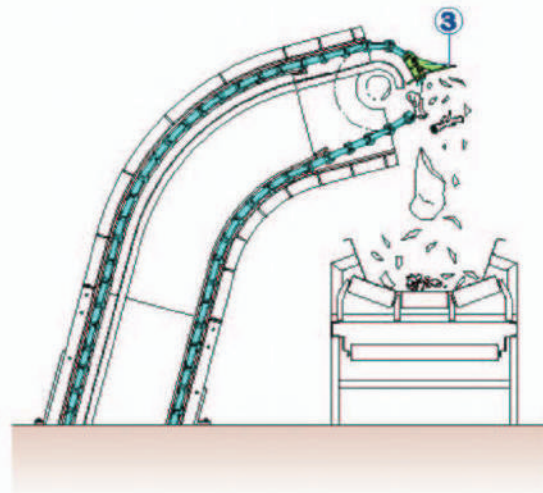


Operation mode of debris removal ▶

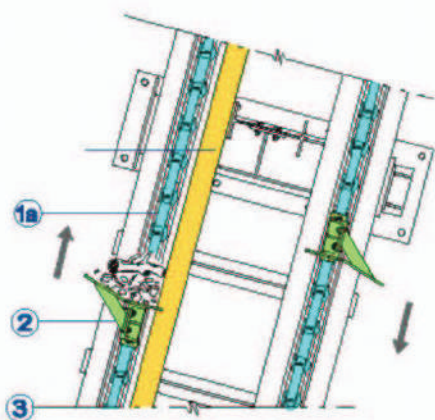
1 Tine stop position



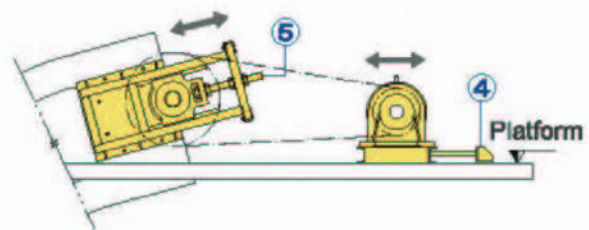
2 Debris discharge



3 Traveling chain moving



4 Driving chain tightener



- 1a - Main Rack
- 1b - Auxiliary Rack
- 2 - Attachment
- 3 - Tine
- 4 - Motor reducer adjustment device
- 5 - Chain Tightener