



Sismat Uluslararası
Arıtma Makinaları
İnşaat Mühendislik
Sanayi ve Tic. A.Ş.



**BACK RAKED
MECHANICAL SCREEN**



BACK RAKED MECHANICAL SCREEN

Back raked mechanical screens are the equipments which are used to solve the problems with regard to filtering, separation and screening of heavy and big size solid materials and they are generally preferred in domestic and industrial wastewater treatment plants. This type of screens are designed with clear openings and large tooth rakes to have a good capture efficiency, remove heavy problem-causing debris and protect the following equipments. The number of rakes varies according to the solid amount present in wastewater.

Sismat Uluslararası Back Raked Mechanical Screens are mainly made up of frame, screen bars, rakes, chain, drive unit.

They are mounted to the channel at an angle because inclination allows them to handle more debris.

FEATURES AND BENEFITS OF SISMAT ULUSLARARASI BACK RAKED MECHANICAL SCREENS:

- High waste capture capacity
- Less maintenance requirement
- Suitable for use in narrow channels
- Easy installation and operation
- Automatic cleaning mechanism by time or level sensors

APPLICATIONS

- Water treatment plants
- Domestic wastewater treatment plants
- Industrial wastewater treatment plants
 - Food industries
 - Slaughterhouses
 - Paper mills
 - Tanneries
 - Fish industries, etc.
- Pumping stations
- Water intake structures
- Hydropower plants
- Power stations

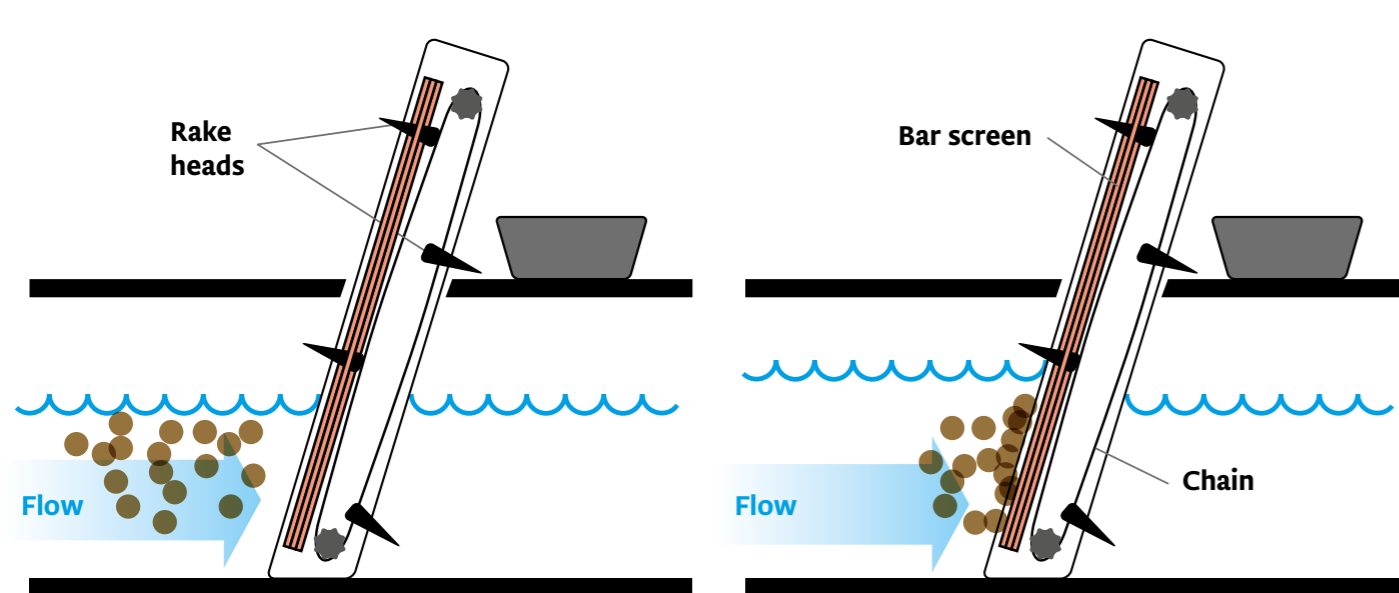
WORKING PRINCIPLE

The rake mechanism of this type of equipment is located on the downstream side of the bar rack. Water flows through the screen bars and wastes accumulate on the screen. Automatic cleaning mechanism starts to move by the signal of time or level sensors. The rakes use back side of the bar screen to hold the screenings. After catching and elevating, the wastes are discharged into a chute or conveyor.

OUR BACK RAKED MECHANICAL SCREEN SPECIFICATIONS

Specifications	
Bar spacing	5 mm - 50 mm
Mounting angle	60° - 85°
Speed	10 m/min.
Rated power	0.37 kW - 0.75 kW
Discharge height (from operational level)	800 mm - 2000 mm
Channel width	400 mm - 1500 mm

*For special dimensions, please consult Sismat Uluslararası Sales Engineers.

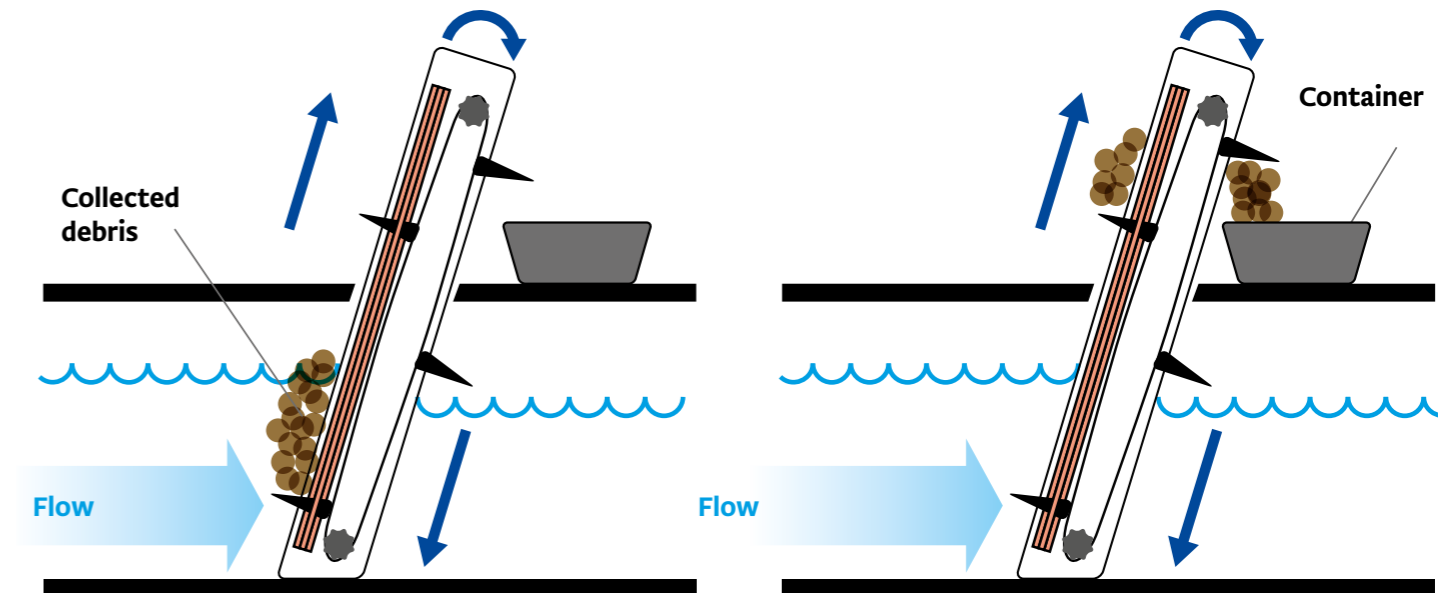


1

Solid materials accumulate on the screen while the wastewater flows through the screen bars.

2

Collected debris clogs the openings of the screen. Because of that reason, the screen needs to be cleaned to keep working properly.



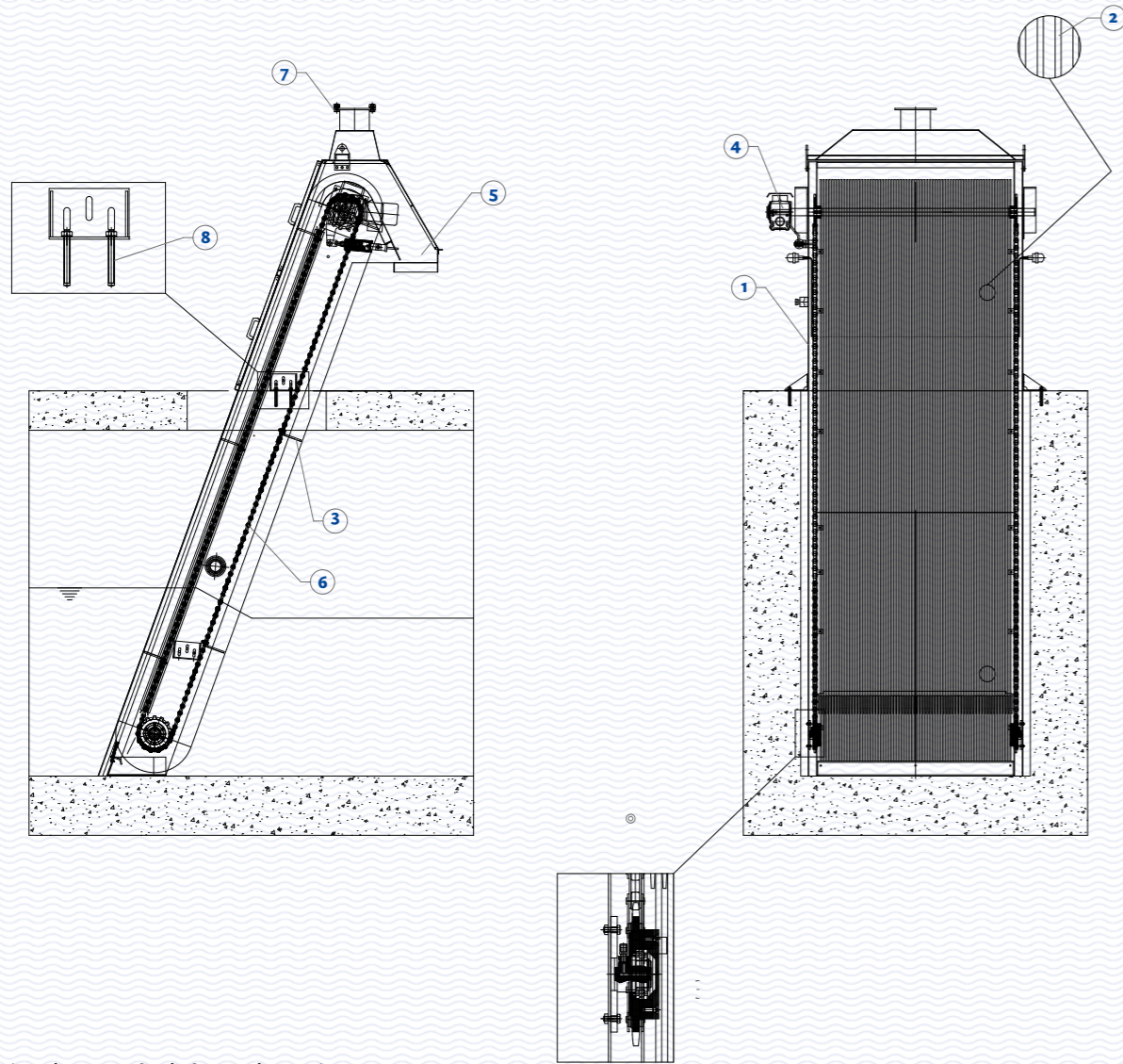
3

Then, automatic cleaning system starts to work and move up the screenings.

4

Finally, the screenings are discharged into a container or conveyor.

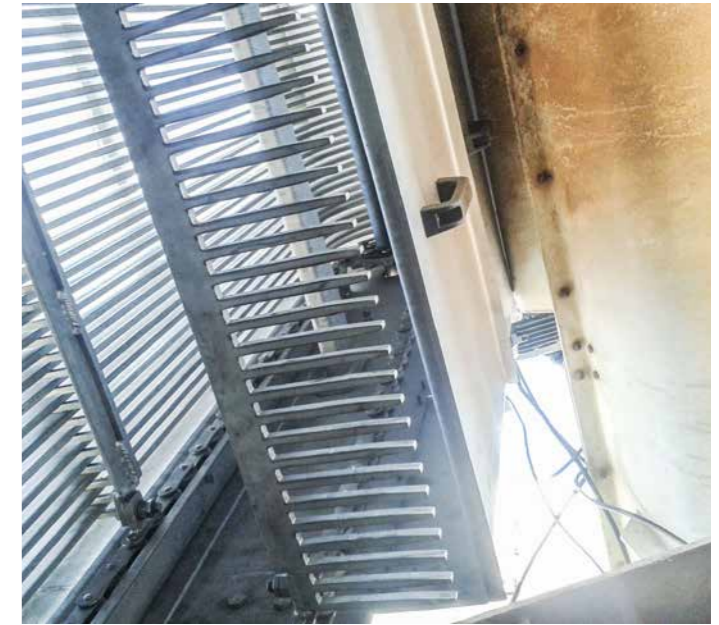
Typical Back Raked Mechanical Screen & Components



Typical drawings are for information only.

OUR BACK RAKED MECHANICAL SCREEN COMPONENTS

	Multi-Rake Mechanical Screen Component	Materials Available
1	Frame	Carbon steel or stainless steel grade, AISI304, AISI304L, AISI316, AISI316L, AISI316Ti, DUPLEX or SUPER DUPLEX
2	Screen bars	Carbon steel or stainless steel grade, AISI304, AISI304L, AISI316, AISI316L, AISI316Ti, DUPLEX or SUPER DUPLEX
3	Rake	Carbon steel or stainless steel grade, AISI304, AISI304L, AISI316, AISI316L, AISI316Ti, DUPLEX or SUPER DUPLEX
4	Drive unit	-according to norm of manufacturer
5	Chute	Carbon steel or stainless steel grade, AISI304, AISI304L, AISI316, AISI316L, AISI316Ti, DUPLEX or SUPER DUPLEX
6	Chain	Carbon steel or stainless steel grade, AISI304, AISI304L, AISI316, AISI316L, AISI316Ti, DUPLEX or SUPER DUPLEX
7	Assembly fasteners	A2, A4 , DUPLEX or SUPER DUPLEX
8	Anchor bolts	A2, A4 , DUPLEX or SUPER DUPLEX





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