



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



**LINEAR MECHANICAL
SCREEN**



LINEAR MECHANICAL SCREENS

Linear mechanical screens are automatic self-cleaning inclined front raked screens which can be used as both fine and coarse screens in all kinds of treatment plants and pumping stations. They are mostly preferred equipment since they have relatively few mechanical components and generally have no, any moving parts permanently located under the water level. This type of screens is mounted to the channel with an angle.

Linear mechanical screens generally consist of main frame, screen group, rake, counter wiper, and drive unit and chute.

FEATURES AND BENEFITS OF SISMAT ULUSLARARASI LINEAR MECHANICAL SCREENS:

- No mechanical parts under water level
- Noise free operation
- Automatically cleaning system by time or level sensors
- Operation in very deep channels and possibility of moving the screenings to high levels

APPLICATIONS

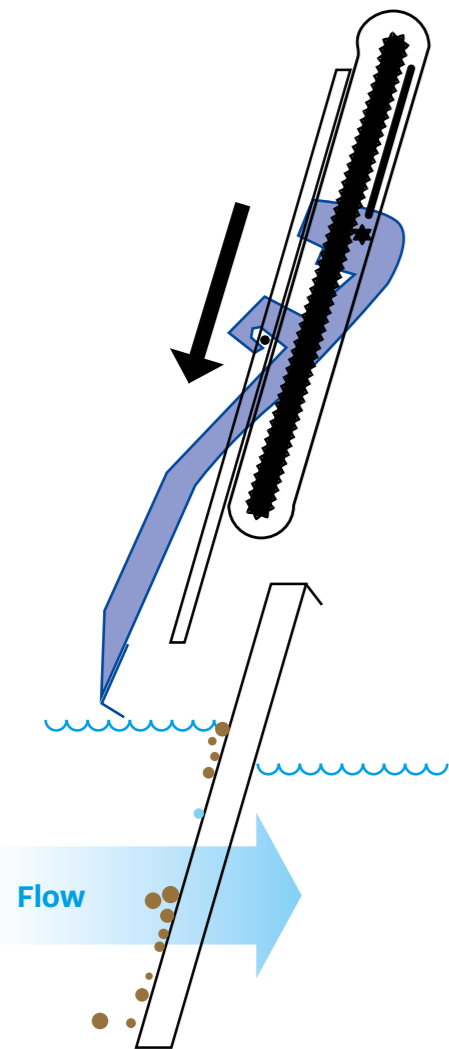
- Water treatment plants
- Wastewater treatment plants
- Industrial wastewater treatment plants
- Power stations
- Pumping stations

WORKING PRINCIPLE

The movement from drive unit is transmitted to the rake as a linear motion via chain system. Scraping motion which starts at the bottom dead point ends when the counter wiper at the top dead point discharges wastes accumulated on the rake into a discharge chute. The rake moves away from the screen while descending motion. When linear mechanical screen is stopped, the rake is parked at the top point and does not prevent water flow. Automatic cleaning system can be operated by time or level sensors.

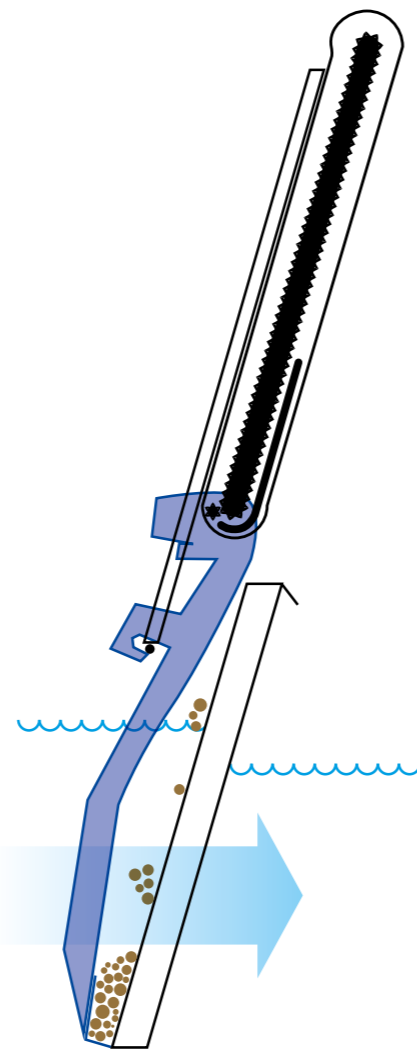
Specifications

Bar spacing	10 mm - 80 mm
Mounting angle	60°-75°
Rake speed	10 m/min.
Channel width	800 mm - 2500 mm
Water depth	Max. 1800 mm
Channel depth	Max. 20000 mm
Discharge height (from operation level)	800 mm - 2000 mm



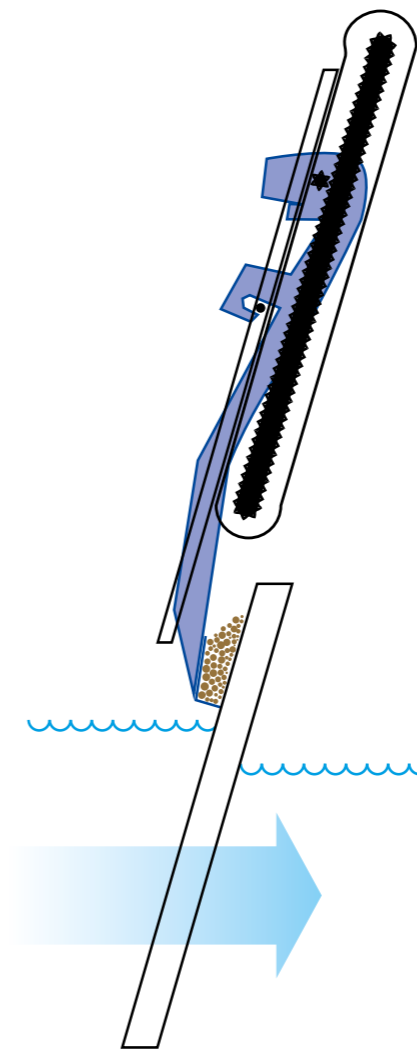
1

The waste accumulates on the bar screens and it causes clogging of the screens.



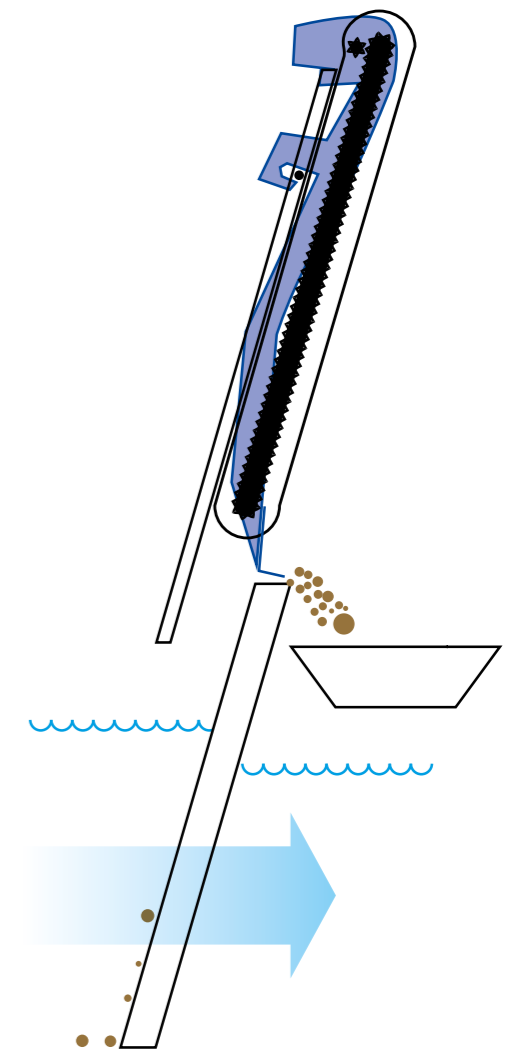
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The cleaning mechanism is automatically activated by time or level sensors



3

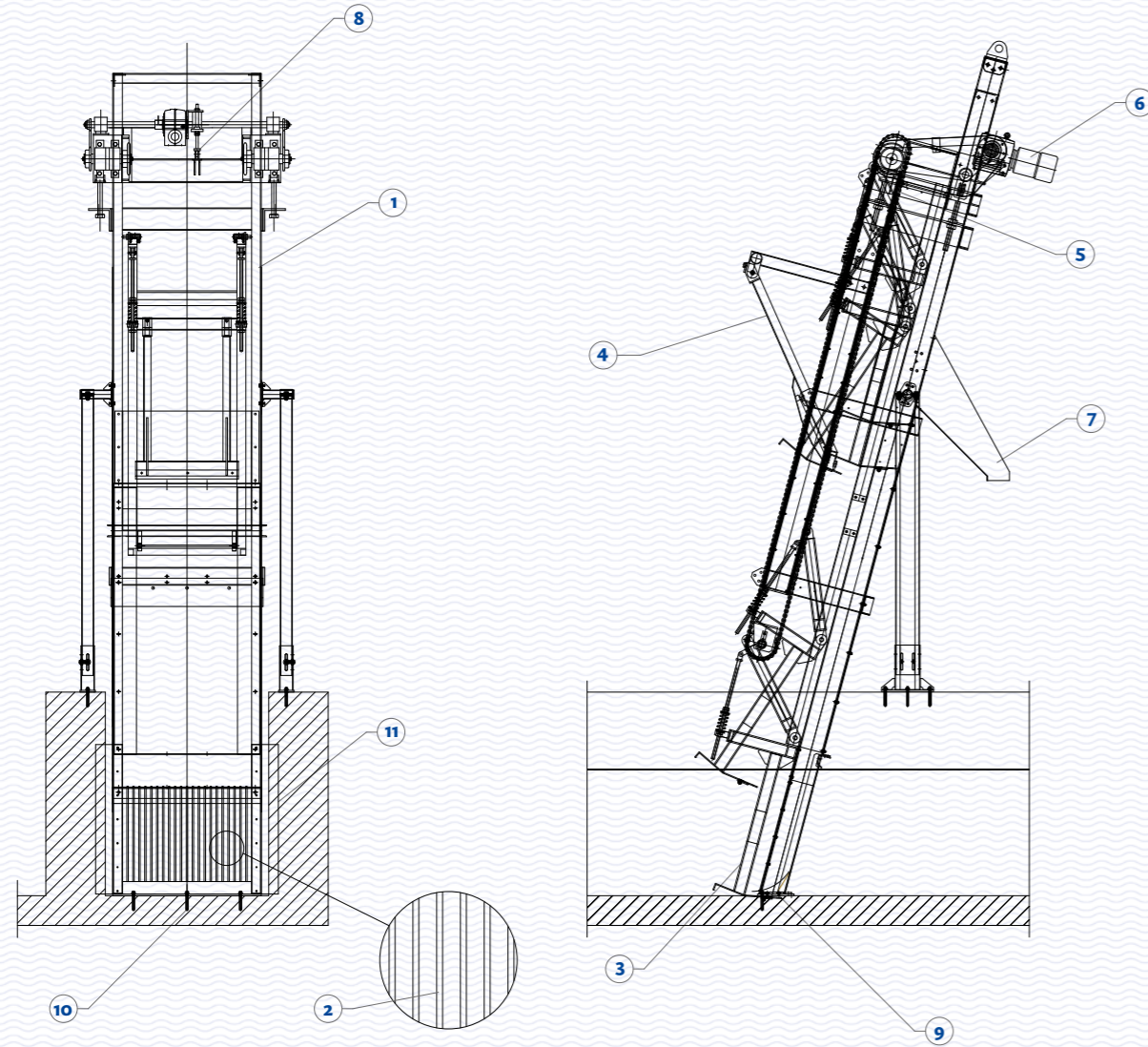
The rake collects and elevates the screenings from the bottom point



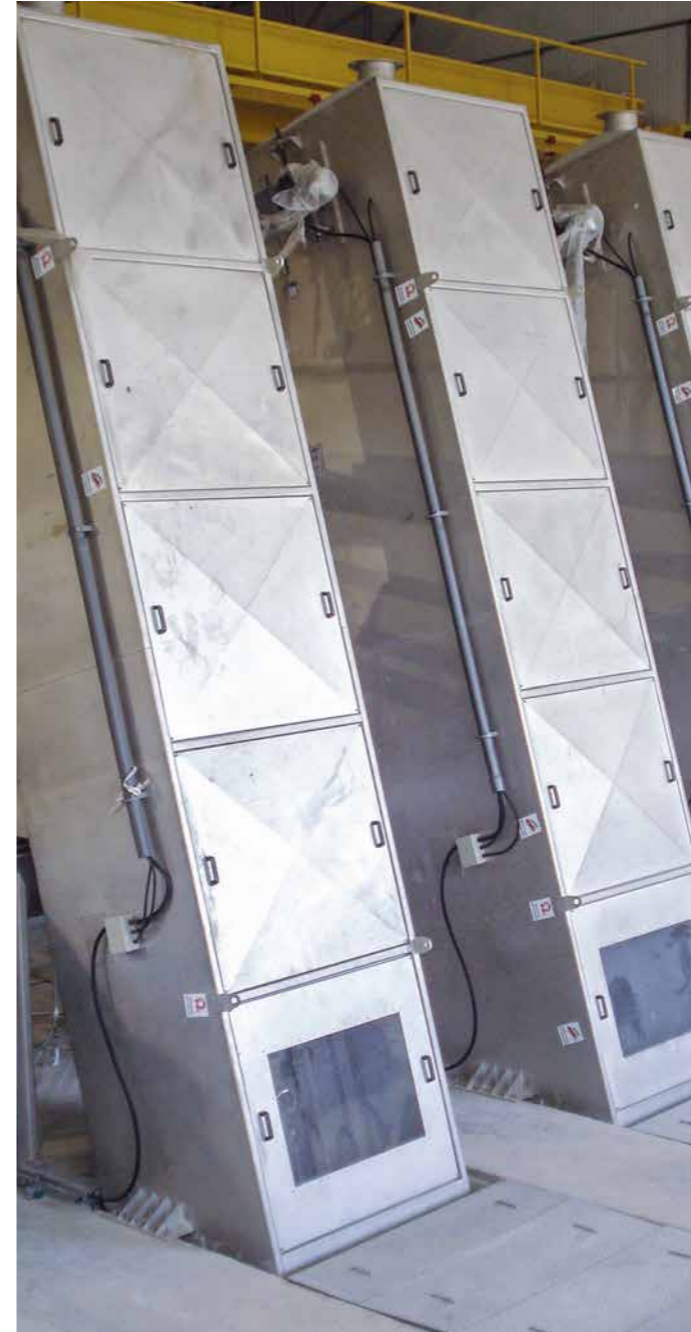
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The collected waste is discharged into a container or conveyor

Typical Linear Mechanical Screen & Components



Typical drawings are for information only.



Linear Mechanical Screen Components	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 Counter wiper	Carbon steel or stainless steel grade, AISI304, AISI304L, AISI316, AISI316L, AISI316Ti, DUPLEX or SUPER DUPLEX
5 Chain & Chain gears	Special steel / chain steel
6 Drive unit	---
7 Chute	Carbon steel or stainless steel grade, AISI304, AISI304L, AISI316, AISI316L, AISI316Ti, DUPLEX or SUPER DUPLEX
8 Mechanical spring torque limiter	---
9 Fasteners	A2, A4, DUPLEX or SUPER DUPLEX
10 Anchor bolts	A2, A4, DUPLEX or SUPER DUPLEX
11 Side sealing	Neoprene





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