

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



PLASTIC CONVEYOR SCREENS





# PLASTIC CONVEYOR SCREENS

Plastic conveyor screens are self-cleaning continuous belt screens which can be used as fine screens in both domestic and industrial wastewater treatment plants. They are generally preferred in leather industry, food industry and paper mills due to the manufacturing materials and non-clogging feature.

Sismat Uluslararası Plastic Conveyor Screens are mainly made up of frame, screen band with carrier hooks, brush and discharge chute.

The essential part of plastic conveyor screens is "carrier hook". The arrangement of hooks on the shafts forms a filter belt which is fitted into a support frame. A reversely rotating brush provides an additional self-cleaning feature.

# FEATURES AND BENEFITS OF SISMAT ULUSLARARASI PLASTIC CONVEYOR SCREENS

- Durable design
- · Easy and silent operation
- · Automatic cleaning mechanism by time or level sensors
- Low maintenance requirement
- Low energy cost

# **APPLICATIONS**

- Water and domestic wastewater treatment plants
- · Industrial wastewater treatment plants
  - Paper mills
- Meat industries
- Bottling plants
- Brewing industries
- Tanneries
- Milk industries
- Chemical industries
- Textile industries (e.g. bleaching process, dyeing process etc.)
- Intake structures
- Reservoirs
- · Pumping stations
- Power stations

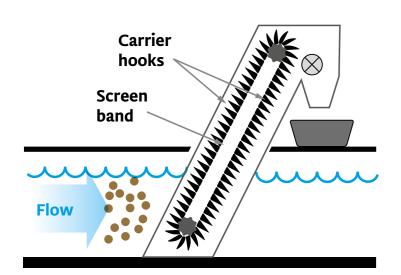


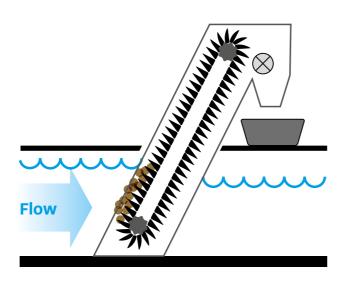
### **WORKING PRINCIPLE**

Solid materials present in the wastewater accumulate on the screen over time. When the level difference between upstream and downstream reaches to the predetermined point, or according to the cleaning time periods, the cleaning mechanism is activated with a signal sent from the control panel and then, band conveyor starts to move.

Solid materials are captured by the carrier hooks placed on the band screen while the wastewater passes through the screen. The carrier hooks move the screenings to the discharge point. The band screen is cleaned with a brush rotating reversely on the discharge point. Therefore, the band screen is clean when it gets back to the water flow. The cleaning mechanism is stopped automatically if there is no any signal.

Pressurized water line can also be placed on the equipment to reduce the risk of entanglement and have an efficient cleaning of the brush and carrier hooks. In case of some compressions of band screens, torque limiter which is activated with a signal or alarm is used to protect the band and motor.

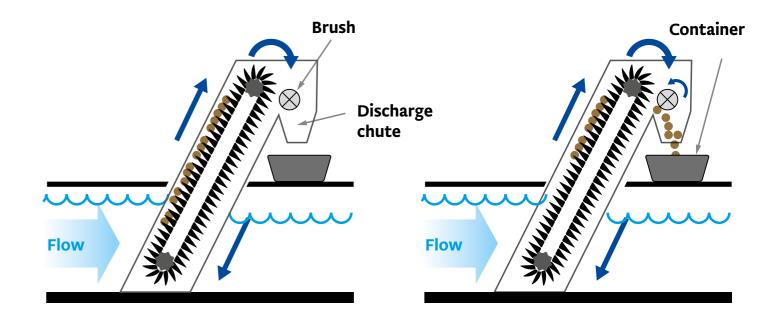




## **OUR PLASTIC CONVEYOR SCREEN SPECIFICATIONS**

Specifications		
Bar spacing	1 mm - 15 mm	
Mounting angle	60°-85°	
Belt speed	2 m/min	
Screening capacity	o.5 ton/h - 1.5 ton/h	
Discharge height (from operation level)	o.8o m -1.50 m	
Channel width	0.40 m – 2.0 m	

<sup>\*</sup>For special dimensions, please consult Sismat Uluslararası Sales Engineers.



1

Water flows through the screen bars.

2

Solid materials remain on the screen surface. That situation causes clogging of the screen and activates the cleaning mechanism, automatically.

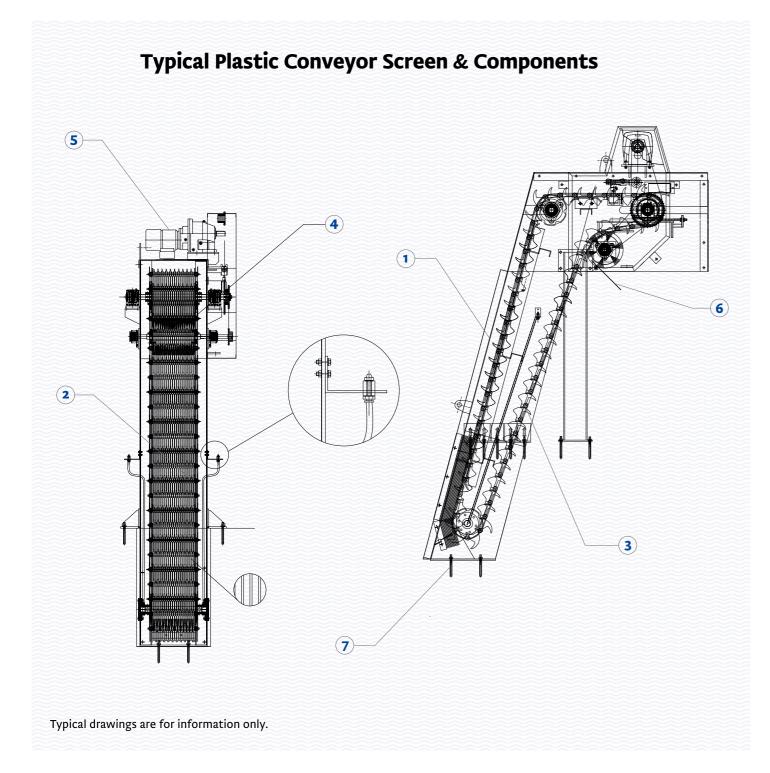
3

Carrier hooks placed on the screen band capture and move the screening materials.

4

The screenings are discharged into a container or conveyor by means of a brush which works reversely.







	Plastic Conveyor Screen Components	Materials Available
1	Frame	Carbon steel or stainless steel grade, AISI304, AISI304L, AISI316, AISI316L, AISI316Ti, DUPLEX or SUPER DUPLEX
2	Screen	Nylon-6
3	Carrier hooks	Nylon-6
4	Brush	PA
5	Drive unit	-according to norm of manufacturer
6	Discharge chute	Carbon steel or stainless steel grade, AISI304, AISI304L, AISI316, AISI316L, AISI316Ti, DUPLEX or SUPER DUPLEX
7	Anchor bolts	A2, A4 , DUPLEX or SUPER DUPLEX

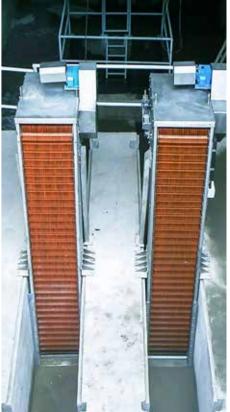














Learn More by visiting

www.sismat.com.tr

Sismat Uluslararası Arıtma Makinaları İnşaat Mühendislik San. ve Tic. A. Ş. Address: Gebze Güzeller Organize Sanayi Bölgesi (GGOSB) Fatih Sultan Mehmet Cd. 5/1 Gebze/Kocaeli/Türkiye Telephone : +90 262 751 12 54 Fax: +90 262 751 12 56