BAHAR
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BACK RAKED MECHANICAL SCREENS

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BACK RAKED MECHANICAL SCREENS

GENERAL INTRODUCTION AND INTENDED USE

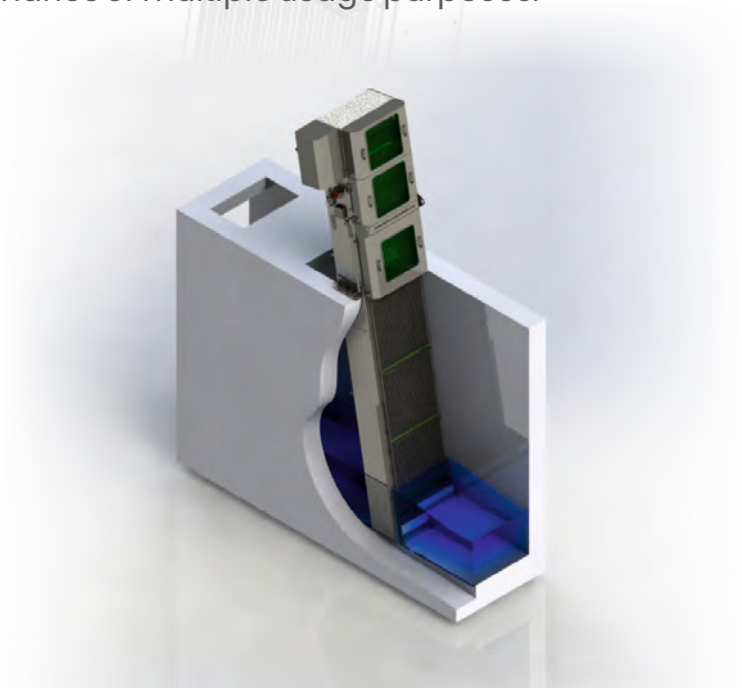
It is the preferred pre-treatment equipment in order to remove the solid materials coming to the wastewater treatment plant from the wastewater. They are mounted at an angle of 60°-85° on the horizontal axis. They are equipment with optimum cost and high operating efficiency and they generally found at the entry of the facility. Thanks to the high removal efficiency, situations such as blockage and deterioration that may occur in the pumps, valves and the pipes are minimized, removal of the suspended solids is provided and treatment process is performed at a lower cost.

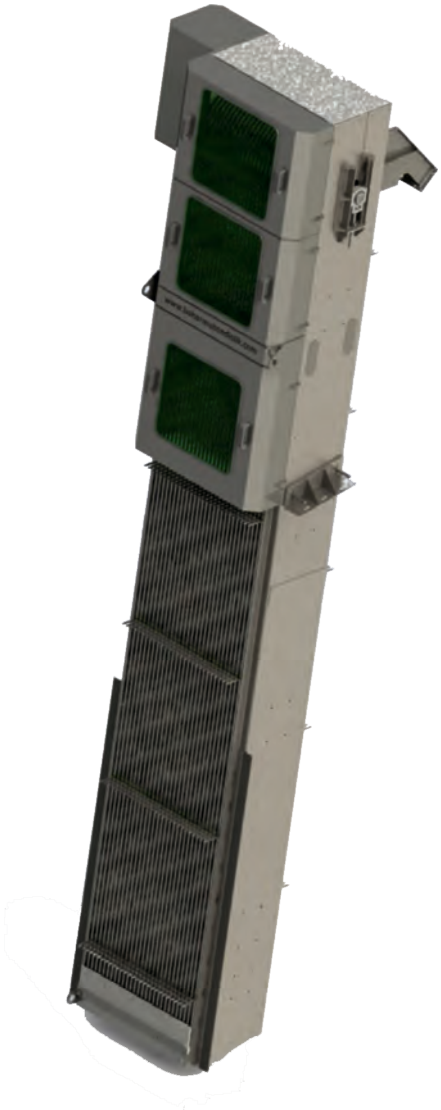
WORKING PRINCIPLE OF EQUIPMENT

While the wastewater passes through the screen metal sheets, the solid wastes larger than the screening gap are separated from the wastewater by getting caught in the screen metal sheets. The wastes accumulated in the screens are cleaned with the rakes that can make an infinite rotation on the vertical axis via the chain and rake the screen gaps from the back of the metal sheets, and are removed from the system by means of discharge chute.

TECHNICAL SPECIFICATIONS

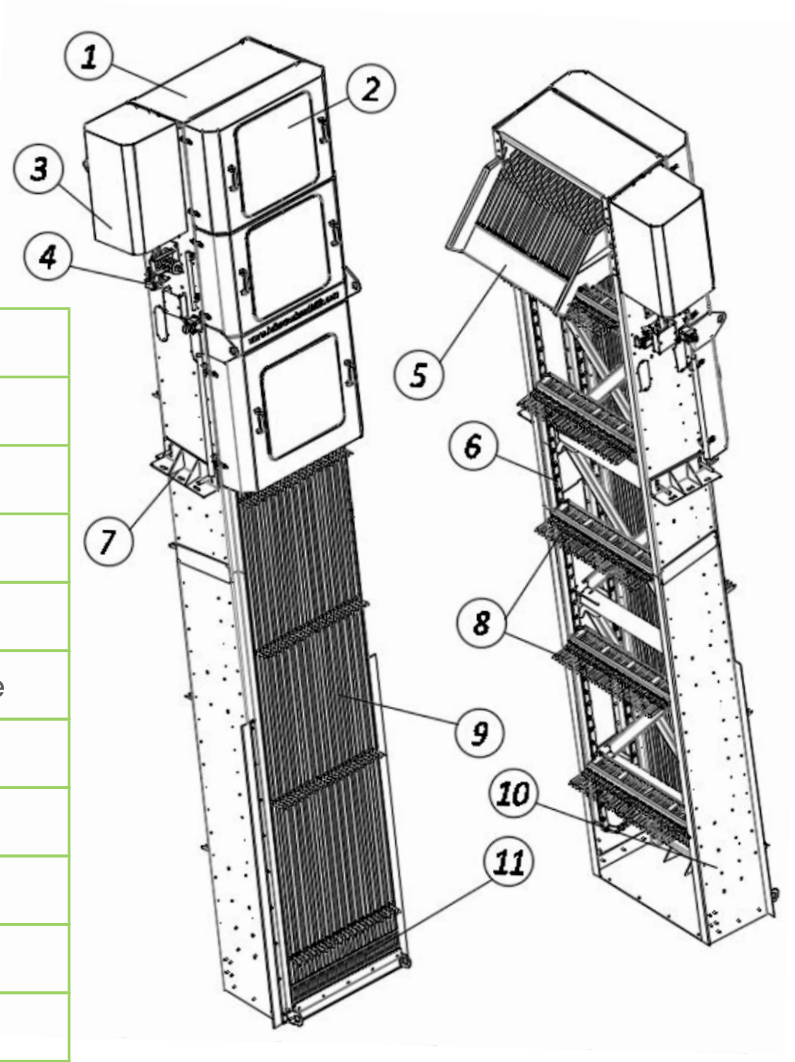
- Individually Interchangeable Rake Ends,
- High Free Passage Area,
- It is manufactured in special processes according to the area of usage, in accordance with the customer demand.
- It is designed for different channel depths and widths.
- It works automatically without the need for an operator, depending on the water level in the screen channel or depending on the time.
- There are OHS protection sheets required to prevent manual intervention to the movable parts on the equipment.
- There are torque switch for the safety of the employees and the equipment. In the event of overloading or strain on the equipment, torque switch activates and stops the system.
- Thanks to its specially designed rakes, it cleans the inside of the channel by holding all the waste accumulated at the bottom of the screen channel.
- Back raked mechanical screens are manufactured in different screening ranges.
- In order to prevent bad odours and visual pollution that may arise from the wastes generated by the screens, the screens can be manufactured with an upper cover, depending on the need. Upper covers also provide additional safety in terms of occupational health and safety.
- There are torque switches that control the operation of the screens in order to prevent any compression and damage on the screen rakes. In the event of any strain, the adjustable pedal attached to the reducer torque arm touches this switch and stops the system automatically.
- These screens, which can be controlled remotely with automation, warn the system main control screen in case of any error, inform the operator, and contribute greatly to the safe operation of the system.
- Back raked mechanical screens are designed to serve many different automation scenarios or multiple usage purposes.



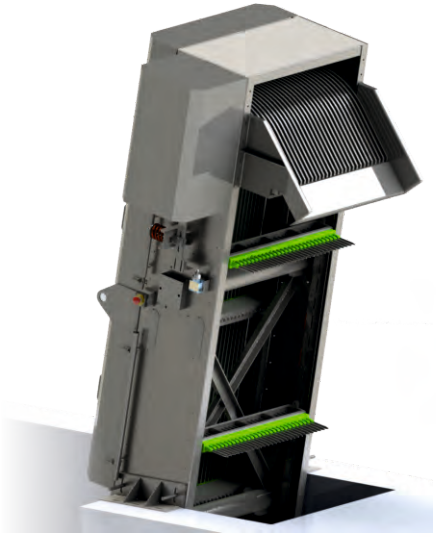


ADVANTAGES

- Fully Automatic Operation,
- No Waste Compression and Blockage,
- Opportunity to Control and Monitor the Operation of the System on SCADA,
- Providing Convenience for Usage and Operation,
- Long-Lasting Usage,
- Low Operation and Maintenance Cost,
- High Cleaning Performance,
- Design Suitable for Heavy-Duty and Working under Harsh Conditions,
- Remote Usage Feature According to Need,
- Opportunity to be Designed Suitable for Narrow and Wide Channels.



No	Name of Parts
1	Chassis
2	Upper Cover
3	Motor / Reducer
4	Torque Safe System
5	Waste Discharge Chute
6	Rake Carrier Chain
7	Montage Base
8	Rake
9	Metal Sheets
10	Chassis
11	Bottom Brush



ACCESSORIES

- Torque Safe System
- Bottom Brush
- Upper Cover*
- Intervention and Maintenance Platform*
- Waste Container*
- Waste Discharge Chute*
- Level Measuring Sensor*
- EMS Button*
- Local Power and Control Panel*

*Back Raked Mecanical Screens

MATERIAL DETAILS

- Chassis: It is manufactured as DIN 1.4301 (AISI 304) or DIN 1.4401 (AISI 316).
- Chain: It is manufactured as DIN 1.4301 (AISI 304), DIN 1.4401 (AISI 316) or S235JR + Electro galvanizing.
- Rake: It is manufactured as DIN 1.4301 (AISI 304) or DIN 1.4401 (AISI 316).
- Metal Sheets: They are manufactured as DIN 1.4301 (AISI 304) or DIN 1.4401 (AISI 316).
- Rake Linkage and Alignment Plastics: They are manufactured as UPE1000.

"Different materials can be preferred in accordance with the request of the customer"

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