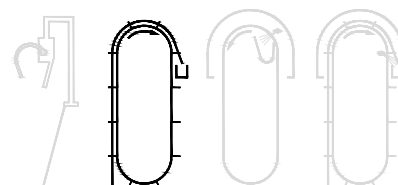




PROFILTER Mechanical bar screen

awarded with the Grand Prix prize of the WOD-KAN Fair

The PROFILTER's product portfolio covers the devices which may form the complete mechanical water and sewage treatment process line, i.e. repair gates, bar screens, bar screen cleaning grabs, mechanical bar screens, macerators, screenings wash presses, screw conveyors, travelling band screens, combined bar and travelling band screens, rotary screens and various types of corrosion-resistant filtrating meshes.



PROFILTER mechanical bar screens (MBS) (fine and course) are innovative and original solutions used for rough screening of water and wastewater.

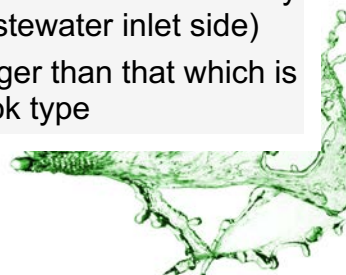
The heart of the matter in the design of the PROFILTER MBS is the grate cleaning mechanism arranged at the clean-water side, which function is also to support the bar grate from the back side and to establish the clearance between the bars. Thanks to its position the grate cleaning mechanism is **not exposed to the destructive influence of polluted water, in particular sewage**. The debris may be collected prior to or behind the MBS, depending on the device type and facility installation conditions.

TECHNICAL PARAMETERS OF THE EXEMPLARY PROFILTER MBS:

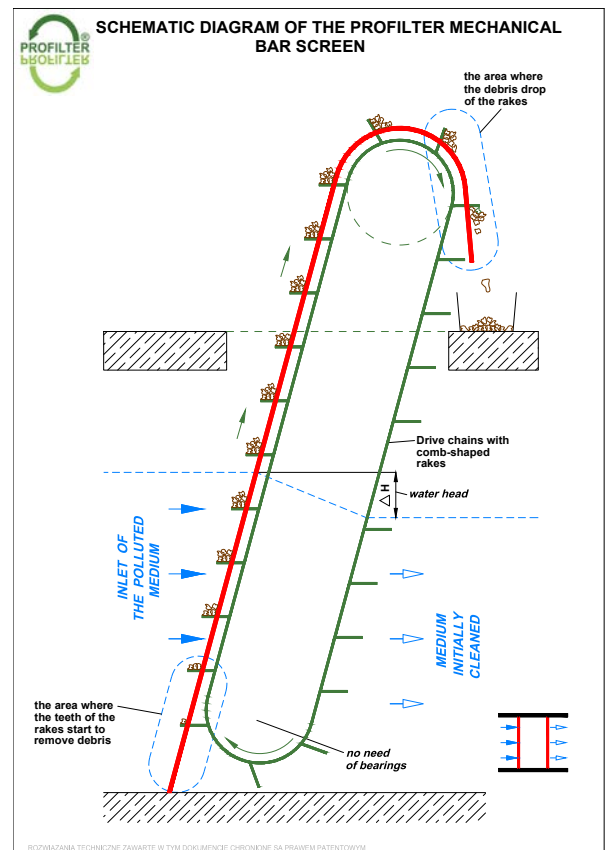
- capacity: ... 48k m³/h
- clearance b/w bars: ... 1 mm, 62 mm
- height: ... ~ 13 m
- width: ... ~ 4,5 m



- **CUSTOMIZED DESIGN** – customized dimensions and technical parameters of the devices, adaptable to the existing building infrastructure
- **SIGNIFICANT COST REDUCTION** – implemented technical solutions enabled to eliminate to a minimum required maintenance works and the most common failures which usually occur in the devices of this type, thus reducing the overhaul costs
- **GREAT ADAPTABILITY** – installation possible in either new or old, revitalized water treatment facilities; devices delivered in parts and assembled on site or fully assembled, ready for installation in the channel
- **HIGH EFFICIENCY** – effective removal of debris (including the fibrous sewage) from the grate surface and from between the bars (the separate bars are effectively "combed" by the rakes, which prevents the build-up of trash in the clearance between them; the debris is removed by a number of comb-shaped rakes which protrude from the grate at the wastewater inlet side)
- **VERY SMOOTH WATER FLOW** – the effective total clearance much larger than that which is available in other types of mechanical bar screens, e.g. of stepped or hook type



- **PROVEN RELIABILITY AND LONG LIFE SPAN** – eliminating of corrosion by the usage of standard elements made of the stainless steel, no additional cleaning equipment required such as brushes or scrapers, no rolling elements (rollers, bearings etc.) in the raw water zone, no chain tension adjustment system needed – driving chains are not prone to unwanted extension
- **ENERGY EFFICIENCY** – electric motors with smaller power consumption in comparison with the devices of old types
- **PROCESS OPTIMIZATION** according to the end-user's actual needs – automatic control system
- **EASY SERVICING** – replacement of worn out parts on the operation floor, easy replacement of individual grate bars and also easy removal of the whole screen from the channel
- **CHEMICALLY AGGRESSIVE ENVIRONMENT OPTION**, e.g. for sea water facilities or petroleum wastewater treatment
- **EXPLOSION-PROOF OPTION WITH ATEX CERTIFICATE**



PROFILTER was established in 1992. The company is a manufacturer and supplier of modern devices based on its own patented invention, which have been recognized at prestigious fairs and exhibitions.

The company's portfolio covers the devices which may form the complete mechanical water and sewage treatment process line, i.e. repair gates, bar screens, bar screen cleaning grabs, mechanical bar screens, macerators, screening wash presses, screw conveyors, travelling band screens, combined bar and travelling band screens, rotary screens and also various types of corrosion-resistant filtrating meshes.

We have extensive experience in the field of mechanical water treatment at surface water intakes with successful implementations in the biggest Polish power plants and CHP plants, chemical and paper industries, oil refineries and municipal services. We realize projects on both the domestic and international markets.



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