Nanr[®] BarScreen Headworks[®] Screening Systems



The Meanest, Toughest Screens in the World™

- Strength of a coarse screen, performance of a fine screen
- Openings as fine as 3/16" (4mm)
- Patented jam protection clears obstructions automatically
- Variable speed operation handles high solids loadings
- Hydraulic capacity of 2 MGD/ft² (1m³/s/m²) of screenfield area
- Lowest headloss in the industry
- Positive rake engagement
- Individually replaceable screenfield bars
- All stainless steel construction

Go to **www.headworksusa.com** to receive a budgetary proposal for your Mahr Bar Screen application.

Description

Advances in water and wastewater treatment processes, increased regulations, and wide acceptance of MBR and IFAS treatment processes within the industry have driven the need for fine screening devices. The Mahr Bar Screen, an all stainless steel front raked, front return bar screen, is the benchmark for the industry. Even in the toughest applications, such as deep channels, high flows, combined sewers with large debris, Mahr Bar Screens operate consistently day after day. Robust craftsmanship reduces capital costs by delivering coarse bar screening durability together with fine screen separation.

Experience: With hundreds of Mahr Bar Screen units installed around the world, Headworks' global experience runs the gamut of applications: from small package plants to screening units as long as 150 feet (45m). The ability to handle over 200 MGD (8.8m³/s) per screen is no challenge for the powerful Mahr Bar Screen. Its robust construction makes it the replacement equipment of choice for tough applications where other screens have failed.

Durability: Headworks is often asked how long our equipment lasts – a question we can't answer as we have yet to see any of our screens fail! Tried and tested screens have been operating in the field trouble free for decades. In 1980, the first Mahr Bar Screen was installed in Vienna, Austria, in a pump station under the Danube River. This very same screen is currently still in operation. The state of the art technology incorporated into our equipment today is built on many of the original robust design traits.

Smart Screen[™] Automatic Jam Protection: The patented reversing feature automatically clears obstructions lodged in the screenfield over 90% of the time without operator involvement. The VFD and PLC controls sense the obstruction and reverse the rake direction. Thus, the rake above the obstruction is forced down on the jammed object. This reverse pressure either successfully dislodges the object or the cycle is repeated in the forward direction. This 'shuttling' motion is repeated up to four times. In the rare event that the obstruction remains, an alarm sounds for the operator and the machine shuts down, protecting the equipment.

Rapid Cleaning Cycle Equals No Blinding: The rakes engage into the screenfield every 5 to 10 seconds depending on flow conditions keeping the screenfield clean. This eliminates the possibilities of blinding and the associated risks of flooding.

Rake Operation: The multiple rake bar teeth positively engage with the screenfield bars even with openings as fine as 3/16" (4mm). The rakes travel in a continuous circuit from the bottom of the channel, up the bar rack and past the debris plate. The screenings are simply scraped off the rake bars into the discharge chute and dropped into a conveyor, compactor or dumpster. The design eliminates the possibility of solids carryover and can easily be totally enclosed for improved odor control and hygiene.

Stainless Steel Roller Chains: The multiple rake bars are mounted on all stainless steel true roller chains. The chains are engineered for continuous, submerged duty without any lubrication and run within tracks on both sides of the self contained frame.

Lowest Headloss in the Industry: Headworks was the first to standardize the use of tapered or trapezoidal shaped screenfield bars into the market. The shape of the bars, together with the rapid cleaning cycle, eliminates blinding factors when sizing applications needs. Thus, headloss across the screen can be as low as 2" (5cm) at 50 MGD (2m³/s) or higher. The Mahr Bar Screen comes with patented replaceable bars.

Minimal Headroom Requirements: The Mahr Bar Screen requires less than 8 feet (2.4m) of overhead clearance, regardless of channel depth, making it ideal for indoor installations.

No Lower Bearing Maintenance: The Mahr Bar Screen utilizes either a lower turnaround or a sprocket assembly. The lower sprocket assembly utilizes an exclusive self-lubricating ceramic bearing. The assembly is maintenance free, highly wear resistant and covered by a standard 3-year warranty. Units have been in operation for over 10 years without a single part being replaced.

Easy Installation: The Mahr Bar Screens robust design is fully assembled at the factory. On site, the screen is simply dropped into the channel. Flanged units are also available for applications with restricted access. The sections are simply bolted together during installation and lowered into the channel.

Many of the exclusive features of the Headworks equipment are either patented or patent pending.







Financially Smart! Low life cycle costs Highly efficient Low maintenance Easy retrofit Low installation costs









Represented by:



800 Wilcrest, Suite 340 | Houston, TX 77042 | USA p: +1.713.647.6667 | f: +1.713.647.0999 | e: hw@headworksusa.com | www.headworksusa.com