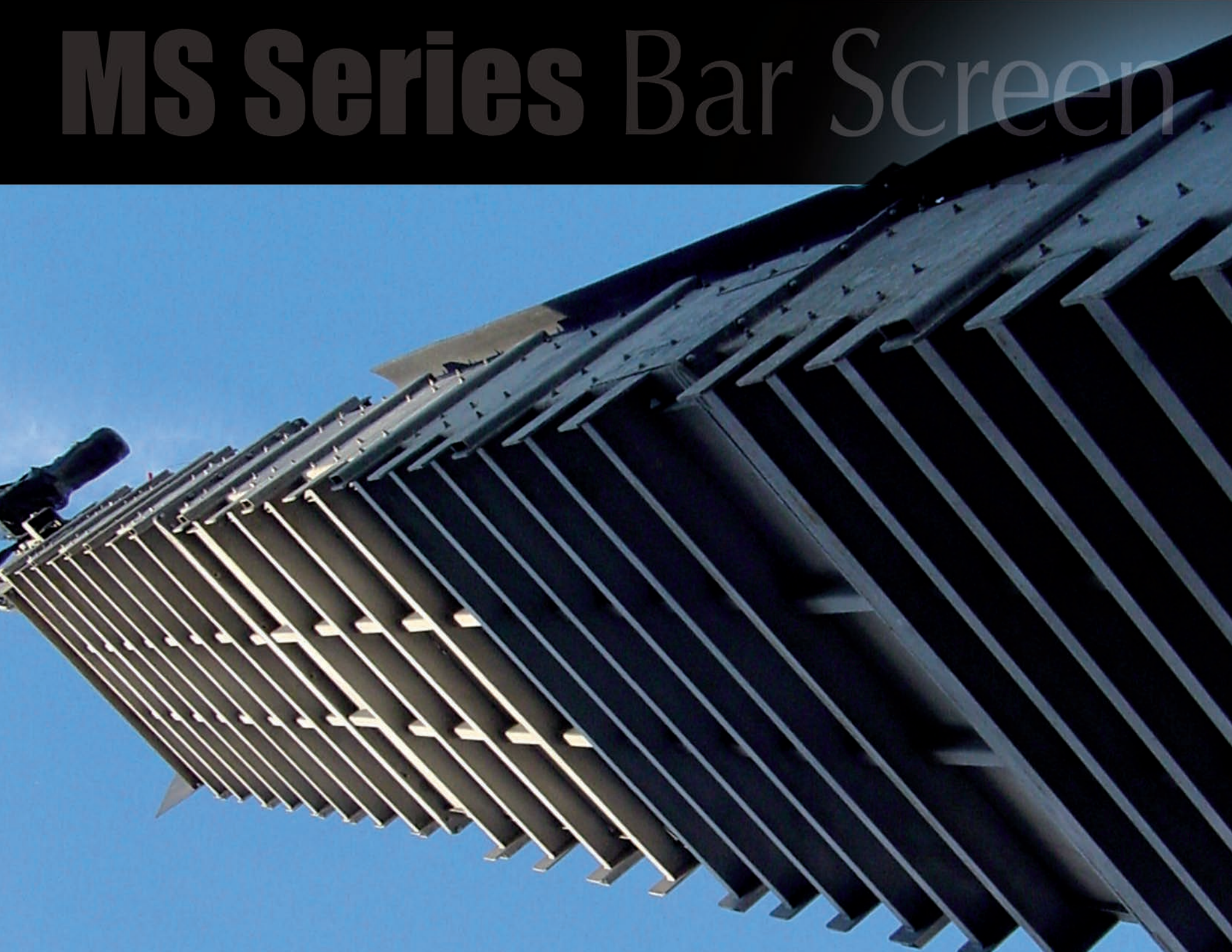
MS Series Bar Screen

Headworks® Screening Systems

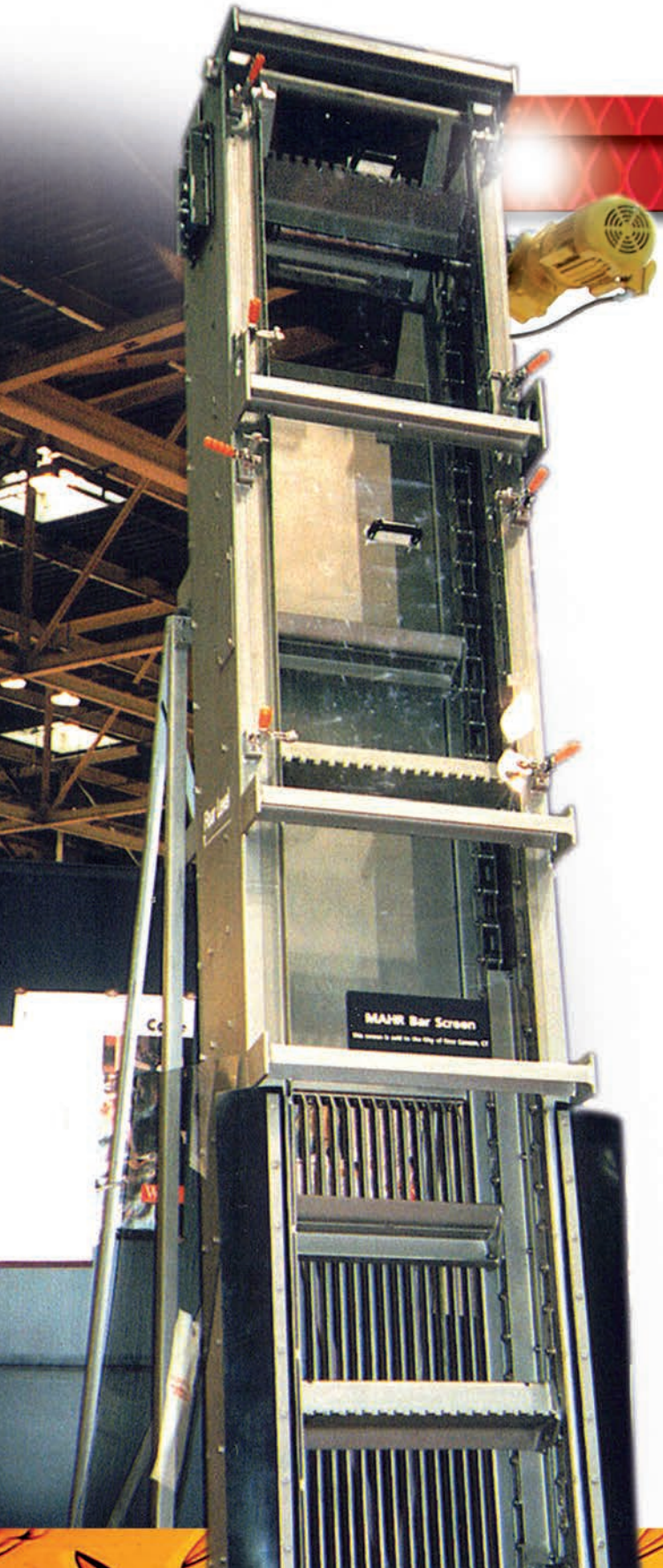
Headworks®

MS Series Bar Screen



MS Series Bar Screen

The First: Still Setting the Standard



- **Two in one solution: strength of a coarse screen, performance of a fine screen**
- **Openings as fine as 3/16" (4 mm)**
- **Patented jam protection clears obstructions automatically**
- **Variable speed operation handles high solids loading**
- **Hydraulic capacity of 2 MGD/ft² (1 m³/s/m²) of screenfield area**
- **Chain guide design ensures that ALL rakes engage the entire screenfield**
- **Lowest headloss in the industry**
- **Positive rake engagement**
- **Individually replaceable screenfield bars**
- **All stainless steel construction**
- **Lowest lifecycle cost**
- **Made in the USA**

Go to **www.headworksintl.com** to request a budgetary proposal for your MS Series Bar Screen application.

Quality that Never Quits™

Advances in water and wastewater treatment processes, increased regulations, and wide acceptance of MBR, MBBR, and IFAS treatment processes within the industry have driven the need for fine screening devices. For over twenty years, the MS Series Bar Screen, an all stainless steel, front raked, front return bar screen, has been the benchmark in the industry for robust reliability. Even in the toughest applications, such as deep channels, high flows, and combined sewers with large debris, MS Series Bar Screens operate consistently every day. Robust craftsmanship reduces capital costs by delivering coarse bar screening durability combined with fine screen separation.

Experience: With over 1,000 MS Series Bar Screen units installed around the world, Headworks' global experience runs the gamut of applications: from small package plants to screening units in excess of 60 feet (18m). The ability to handle over 200 MGD (8.8m^3/s) per screen is no challenge for the powerful MS Series Bar Screen. Its robust construction makes it the replacement equipment of choice for tough applications where longevity, durability and low lifecycle costs are key.

Durability: Headworks is often asked how long our equipment lasts – a question we still can't answer. In over 20 years we have yet to see any of our bar screens fail! Tried and tested screens have been operating in the field, trouble free, for decades. The state of the art technology incorporated into our equipment today is based on many of the robust design traits as the original.

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 is initiated for the operator and the machine shuts down, protecting the equipment. Even while in the automatic reverse mode, the screenfield is cleaned by the rakes above and below the blockage point.

Rapid Cleaning Cycle Equals No Blinding: The rakes engage the screenfield as often as 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.

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

Rake Operation: The multiple rake bar teeth positively engage with the screenfield bars, 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 into the discharge chute and dropped into a conveyor, compactor or dumpster. The design eliminates the possibility of solids carryover and can easily be completely enclosed for improved odor control and hygiene.

Stainless Steel Roller Chains: The multiple rakes are mounted on 100% stainless steel 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. Thus, headloss across the screen can be as low as 2" (5cm) at 50 MGD (2m^3/s) or higher. The MS Series Bar Screen comes with patented replaceable bars.

No Lower Bearing Maintenance: The MS Series Bar Screen utilizes either a lower turnaround or a sprocket assembly. The lower sprocket assembly is an exclusive self-lubricating ceramic bearing. The assembly is maintenance free, highly wear resistant, and covered by a standard 5-year warranty. Units have been in operation for over 10 years without a single part being replaced.

Easy Installation: The MS Series 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.

Five Year Limited Warranty

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

Lower Your Costs!

- Two in one solution
- Low lifecycle costs
- Low maintenance
- Low installation costs
- Easy retrofit
- Highly efficient

MS Series Bar Screen

Multiple rakes engage into the screenfield as often as every 5 to 10 seconds.

Headworks®

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