



MONSTER SEPARATION SYSTEMS®



Bandscreen Monster®

This system offers incredibly high capture rates and is able to remove a wider variety of solids, particularly small debris, better than traditional screens. It can also be used to protect high-tech Membrane Bioreactors.

The rotating panels are positioned parallel to the flow and as wastewater enters the screen it flows through the perforated screening panels. Easy to retrofit into existing channels and installs at a 90° inclination.

Unique Flow Design

- Zero carryover and the highest capture rate of all screens*.
- Perforated openings capture twice as much debris as bar screens.
- Perforated UHMW inserts limit hair pinning (replaceable) with stainless steel frame.

Enhanced Cleaning System

- Spray bar keeps the screen's panels clear.

Heavy-Duty Stainless Steel Roller Chains

- Stainless steel construction ensures long life.
- Roller chains track smoothly in UHMW guides.

Equipment Sizing

Screen panel hole size: \varnothing 5/64", 1/8" or 1/4" (2, 3 or 6mm) Perforations

Minimum Wash Water Head at Spray Jets: 55 PSI (3.8 bar)

Materials of Construction

Screen Structure: 304 or 316 Stainless Steel

Screen Panels: UHMW Plates, 1/4" or 3/8" Thick



**EXCELLENT
PROTECTION
FOR MBRs**

Monster Separation Systems®



Bar Screen Monster®

The highly efficient Bar Screen Monster uses a reciprocating rake to screen out debris in headworks and pump stations. It is designed to provide quick removal of heavy slugs of debris in order to protect downstream processes.

Heavy Duty Design

- All Stainless steel construction.
- Completely self-contained and shipped fully assembled and ready to operate.
- Completely enclosed above the operating floor level with easy to remove stainless steel guards.
- The pin rack system can be removed from the side frame in 4' (1.2m) sections, and individual rollers and bushings can be removed.

Submersible Drive Motor

- 1 HP (0.7 kW) fully submersible, explosion proof brake motor.
- Requires lower headroom and smaller footprint than similar screens.

Stainless Steel Bar Rack

- Curved sill plate at base of the bar rack forms a path for rake.
- Individual bars can be replaced and requires no welding.

Equipment Sizing

Bar Spacings: From 3/8" (10mm) and Up

Widths: From 2.5' to 6.5' (0.76m to 2m)

Depths: Up to 12' (3.6m)

Angle: 80, 85 or 90 Degree Inclination

Bar Types: Rectangular or Tapered Bars



Monster Separation Systems[®]

Chain & Rake Monster[®]

This highly efficient continuously raked bar screen is used in headworks, pump stations and storm overflows where large concentrations of debris are expected. The Chain and Rake Monster is designed to provide quick removal of heavy slugs of material in order to protect downstream processes.

Replaceable rake teeth are bolted to the rake support which is bolted to the chain on each side. They pass through a bottom guide track which avoids the necessity of sprockets and bearings in the sewage flow increasing system life. For units that are 20' (6m) and deeper JWC has a design for sprockets in the bottom to help reduce the loads on the chain.

Heavy Duty Design

- All stainless steel construction.
- Completely self-contained and shipped fully assembled and ready to operate (or as required by the job site).
- Completely enclosed above operating floor level with easy to remove stainless steel guards.

Stainless Steel Bar Rack

- Curved sill plate at base of grid forms path for rakes.
- Available with bar spacings from 1/4" (6mm) and up.
- Efficient debris removal by pivoted wiper with UHMW blade.

Equipment Sizing

Bar Spacings: From 1/4" (6mm) and Up

Widths: From 2' to 8' (0.6m to 2.4m)

Depths: Up to 25' (7.6m) and Greater with a 5' (1.5m) Max Discharge Height

Angle: 70° to 90° Degree Inclination; 75° Standard

Bar Types: Rectangular or Tapered Bars



Monster Separation Systems®

Finescreen Monster®

The Finescreen Monster incorporates a continuous band of stainless steel panels or optional StapleGuard ultra high molecular weight (UHMW) polyethylene perforated panels attached to heavy-duty stainless steel roller chains. Panels available with 1/8" or 1/4" (3 or 6 mm) openings. Stainless steel rollers track in UHMW guides at the bottom of the screen, thus eliminating the need for sprockets or bearings submerged in the wastewater flow.

Advanced Design

- Completely stainless steel.
- UHMW side seals and bottom sealing strip prevent debris from passing around the screen.

Enhanced Cleaning System

- Brushless cleaning system using water spray.
- Lower Maintenance and better panel cleaning.

Ease of Maintenance

- Easy to lift access covers and easy to reach assembly allows simple fine tuning.

Staple Guard UHMW Polyethylene Perforated Panels (optional)

- Reduces stapling (or hair pinning) on the panels.
- Highly abrasion, wear and corrosion resistant.

Equipment Sizing

Screen Panel Hole Size: \varnothing 1/8" or 1/4" (3 or 6mm) Holes

Depth: up to 20' (6m) with a max 5' (1.5m) Discharge Height

Width: 2' to 8' (.6 to 2.4m)

Angle: 60° to 85° Inclination; 70° Standard



Since its founding in 1973, JWC Environmental has become a world leader in solids reduction and removal for the wastewater industry with its Muffin Monster grinders and Monster Separation Systems. JWC also solves challenging size reduction and processing problems in commercial and industrial applications through its Monster Industrial division. JWC Environmental is headquartered in Santa Ana, California, and has a global network of representatives, distributors and regional service centers to provide customer support.

For more information, visit JWC Environmental at www.jwce.com.



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