



BIOPURE® Mechanical Bar & Rotary Drum Screens

Coarse & Fine Solids Filtration • Fully Automatic • Stainless Steel Construction

SYSTEM OVERVIEW & TECHNOLOGY

BIOPURE® Mechanical Bar & Rotary Drum Screens provide high-efficiency automatic screening designed to remove coarse floating debris and fine suspended solids from municipal and industrial wastewater. By removing solid waste during raw pre-treatment, these heavy-duty stainless steel systems protect downstream pumps, pipelines, aerators, MBBR media, and membranes while automating extraction and reducing operational costs.

✓ Fully automatic 24×7 solid debris extraction with minimal maintenance and high hydraulic performance.

0.25 - 50 mm
OPENING SPACING RANGE

Up to 90%
FINE TSS REMOVAL EFFICIENCY

SS304 / SS316
CORROSION RESISTANT MOC



★ KEY SYSTEM ADVANTAGES



Fully Automatic

Unattended PLC/timer cycles.



Pump Protection

Prevents downstream clogging.



Low O&M

Efficient drive motors.



Odor Free

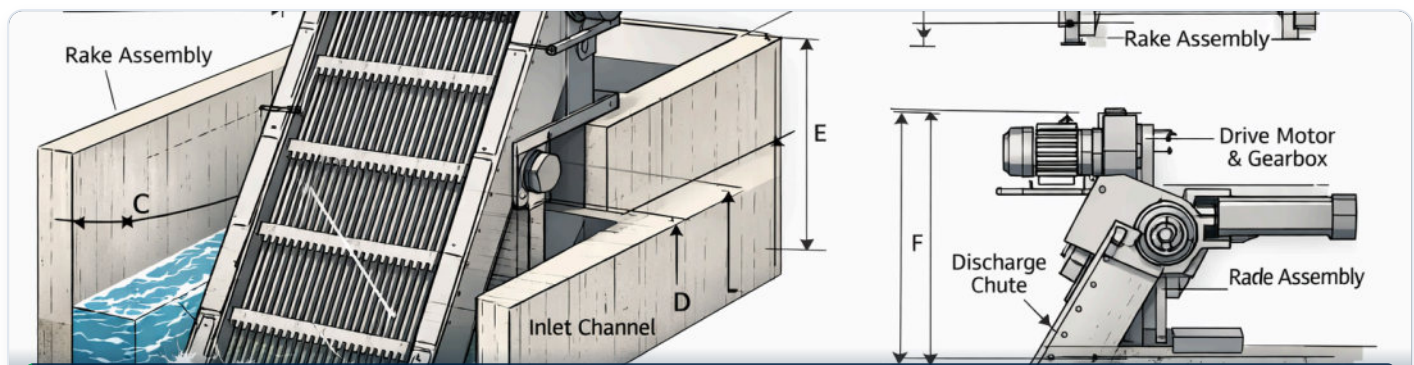
Fully enclosed covers option.



Pre-Treatment Performance Improvement

Extracting coarse and fine solids reduces downstream TSS loading by up to 25%, extending biological equipment service life.

MECHANICAL BAR SCREEN SYSTEM

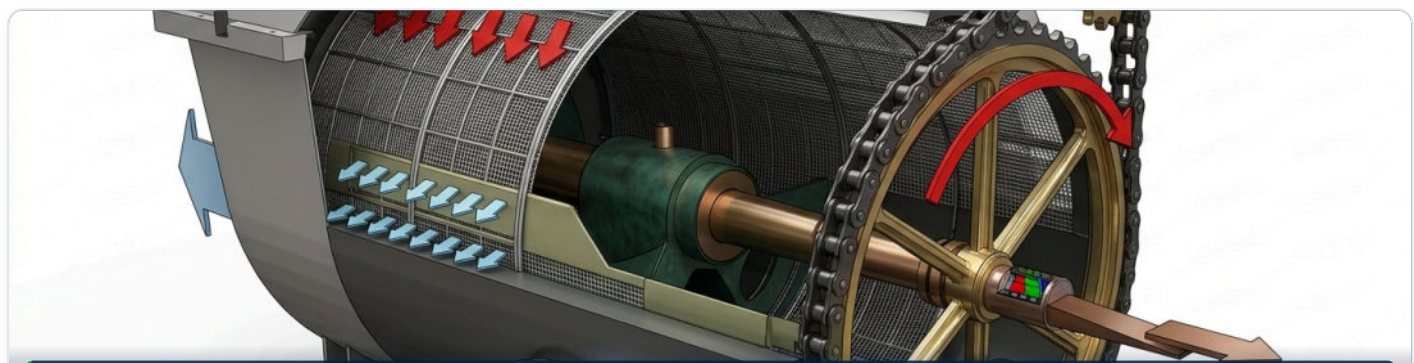


≡ Mechanical Bar Screen - Fine & Coarse Solids Removal

MECHANICAL BAR SCREEN STANDARD MODELS

EQUIPMENT TYPE	STANDARD MODEL NAME	KEY MODEL CAPACITY / SPECIFICATION
Mechanical Bar Screen	BMW-MBS-300	300 mm Channel Width
Mechanical Bar Screen	BMW-MBS-500	500 mm Channel Width
Mechanical Bar Screen	BMW-MBS-800	800 mm Channel Width
Mechanical Bar Screen	BMW-MBS-1000	1000 mm Channel Width
Mechanical Bar Screen	BMW-MBS-1500	1500 mm Channel Width

○ ROTARY DRUM SCREEN SYSTEM



↻ Rotary Drum Screen - Fine Solids Removal

ROTARY DRUM SCREEN STANDARD MODELS

EQUIPMENT TYPE	STANDARD MODEL NAME	KEY MODEL CAPACITY / SPECIFICATION
Rotary Drum Screen	BMW-RDS-100	10 – 50 m³/hr Flow Capacity
Rotary Drum Screen	BMW-RDS-200	50 – 150 m³/hr Flow Capacity
Rotary Drum Screen	BMW-RDS-300	150 – 400 m³/hr Flow Capacity
Rotary Drum Screen	BMW-RDS-400	400 – 1000 m³/hr Flow Capacity
Rotary Drum Screen	BMW-RDS-500	1000 – 3000 m³/hr Flow Capacity



TECHNICAL SPECIFICATIONS

TECHNICAL PARAMETER	MECHANICAL BAR SCREEN	ROTARY DRUM SCREEN
Primary Application	Coarse Pre-Treatment Filtration	Fine Pre-Treatment Filtration
Aperture / Slot Opening	3, 6, 10, 15, 20, 30, 50 mm	0.25 – 6.0 mm
Flow Capacity	Up to 10,000 m³/hr	10 – 3,000 m³/hr
TSS Removal Efficiency	Coarse Debris Removal	Up to 90% TSS
Channel / Drum Dimensions	Width: 300–3000 mm Depth: Up to 12m	Dia: 300–1500 mm Length: 500–4000 mm
Material of Construction (MOC)	SS304 / SS316 Stainless Steel	SS304 / SS316 (Wedge-Wire / Perforated)
Motor Rating / Drive	0.37 – 5.5 kW Helical Gear Drive	0.37 – 3.0 kW Helical Gear Drive
Cleaning Mechanism	Reciprocating Multi-Rake Teeth	High-Pressure Spray Wash System
Control System	Auto / PLC Timer / Level Sensor Driven	Auto Continuous / Timer Control
Installation Type	Civil Channel Inclined Mount	In-Channel / Tank Tank-Mounted Box

TARGET APPLICATION SECTORS



Municipal STPs

Raw sewage intake, pumping stations & municipal treatment plants.



Industrial ETPs

Textile, paper & pulp, chemical, and tannery effluent treatment.



Food & Dairy

Food processing, beverage plants, slaughterhouses & dairies.



Water Intakes

River, canal, lake intakes & sea water pre-filtration systems.



Customized Engineering & Turnkey Integration

Biotech Water provides customized mechanical screening designs engineered specifically to match your channel dimensions, flow parameters, and effluent characteristics.