OVIVO

RAW WATER INTAKE
BAND SCREENS

FINE SCREENING FOR WATER INTAKES

- No debris carry-over to downstream processes
- Compact footprint, significant screening area
- Robust design for various hydraulic conditions
- Available for conversion of thru flow to dual flow
- VFD drive package for speed control

Optional fish recover features to meet **US EPA 316(b)** and other environmental regulations

BRACKETT GREEN®

DUAL FLOW BAND SCREENS

www.ovivowater.com

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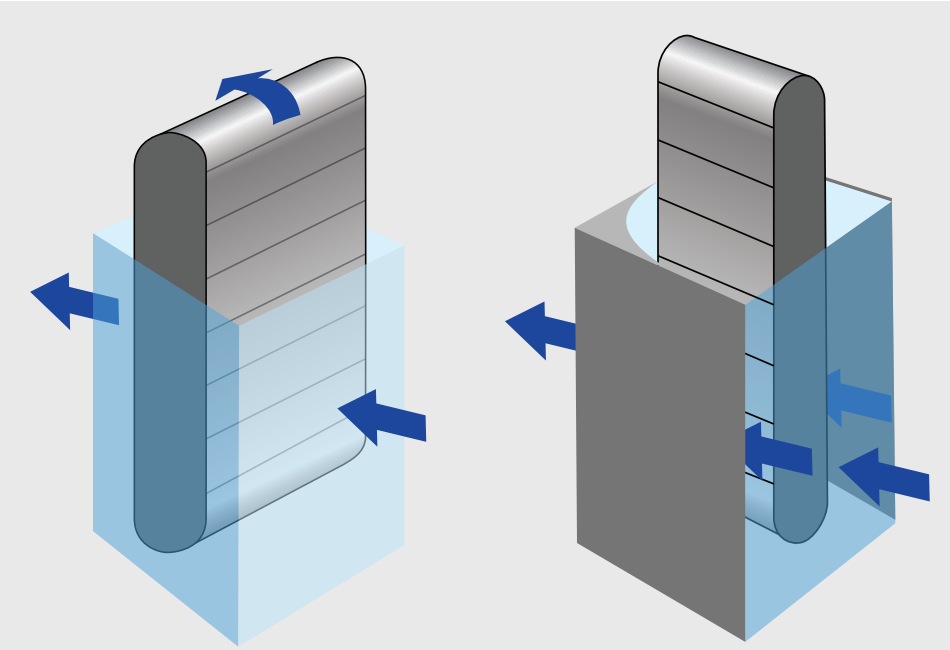
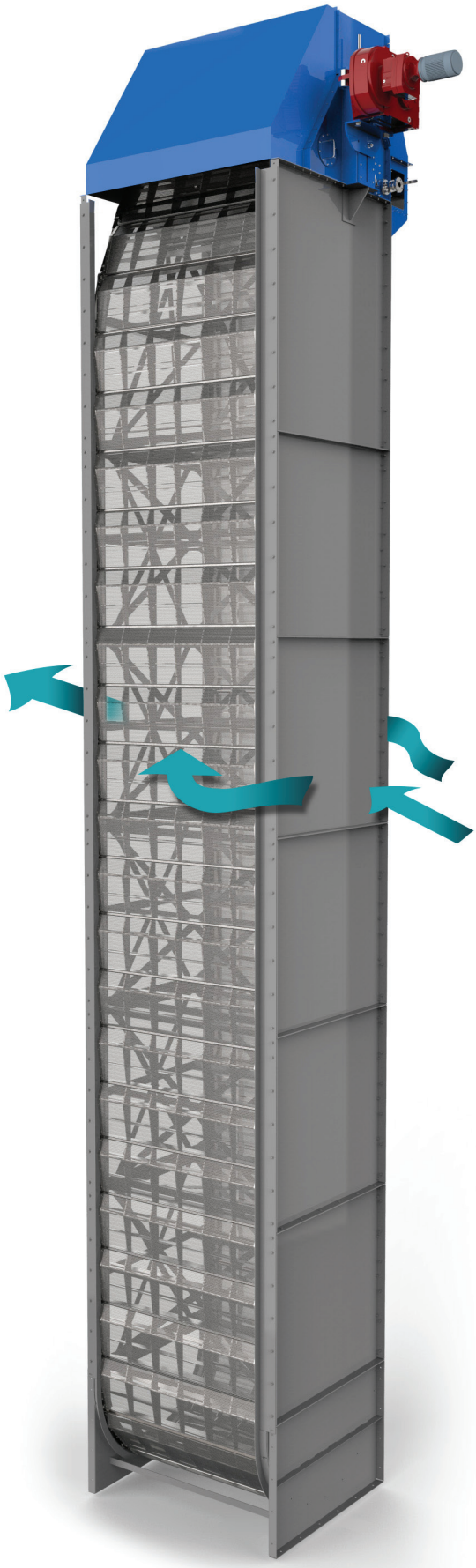


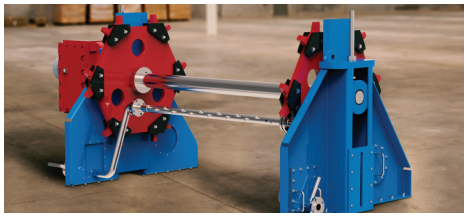


SCREEN OPERATION
IMPROVING ON PERFORMANCE

Brackett Green® Dual Flow Band Screens are designed for installation on raw water intakes, where continuous and efficient methods of removing floating and suspended solids are required to protect pumps, condensers, heat exchangers, membranes and other critical equipment.

The "dual flow" (DF) pattern avoids debris carry-over inherent to the "thru flow" (TF) pattern. Fitted with mesh aperture sizes from 1.0mm to 10mm (1/16" to 3/8"), DF screens can be installed as a single system or as part of a multi stage system. Screens are designed for continuous operation in harsh environments over a range of hydraulic conditions.

ENDLESS BAND
MINIMAL MAINTENANCE



Water passes through the dual flow screen's endless band of screening panels. Debris collected on the influent face of mesh panels is raised to deck level and removed by back-washing. Debris larger than the mesh aperture is prevented from by-passing. Debris carry-over is not possible. Chains (supported by two sprockets above the deck) carry the screening band.

The drive is provided by an electric motor through a shaft-mounted reduction gear unit. The main chains operate in guide sections fitted with wearing strips, around a semi-circular boot to eliminate submerged sprockets. The entire band operates in a self-supporting fabricated frame eliminating critical civil accuracy and accommodates future maintenance.

DESIGNED TO MEET YOUR NEEDS

FEATURES TO CREATE AN OPTIMAL SOLUTION

PURPOSE ENGINEERED

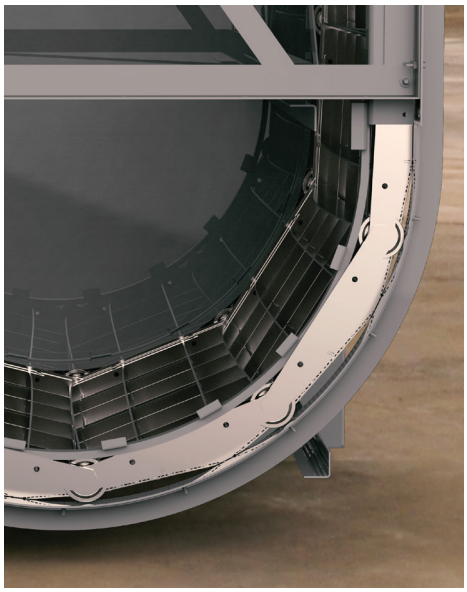
Brackett Green Dual Flow Band Screens are purpose designed for each application. Screens incorporate specific features and options to suit individual operating and site conditions.

These include:

- Dual flow pattern for new civil works
- Conversion of existing intakes from thru flow to dual flow
- Various effective widths and exit openings
- Free standing main frame with solid front plate
- A range of material options suitable for fresh, brackish or seawater
- Optional Fish Recovery to meet US EPA 316(b) and other environmental regulations
- Features to reduce / simplify maintenance including:
  - Shaft mounted drives eliminate multiple components
  - Low profile head to allow easy accessibility
  - Oversized chain roller to reduce drive power and increase life
  - Boot section roller tracks to eliminate submerged sprockets & bearings
  - Sprocket wear rims to increase chain life
  - Replaceable wear track bars for future maintenance

FRAME CONSTRUCTION

The main chain guides and head frame assembly (complete with drive gear) are supported by a fabricated steel (i.e. carbon, stainless or duplex) frame. This is built in sections and is freestanding in the screen chamber. The DF pattern works in conjunction with the civil works exit and the Dual Flow Conversion (DFC) fits within the existing TF guides. This design solution reduces civil works and eliminates the need for accurate alignment of chain guides attached to fluctuating civil works. Additionally, this style of frame construction allows the complete screen to be removed as an assembly or in sections for periodic maintenance.



PROTECTION OF AQUATIC LIFE

TACKLING 316(B) IS S.I.M.P.L.E® WITH OVIVO!

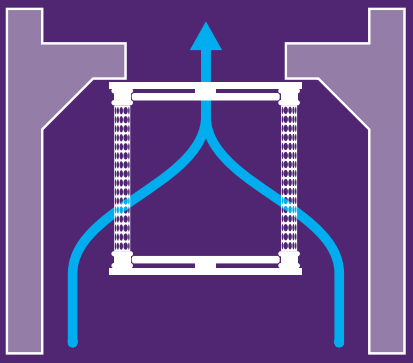
Ovivo's team pioneered the "stalled fluid zone" which is not only utilized, but recognized as "Best Technology Available (BTA) or a Best Practice for the prevention of adverse environmental impacts to indigenous aquatic life. Known in the industry as the S.I.M.P.L.E® Fish Recovery Screen, this design has proven to enhance fish survivability at numerous installations.

FLOW PATTERN

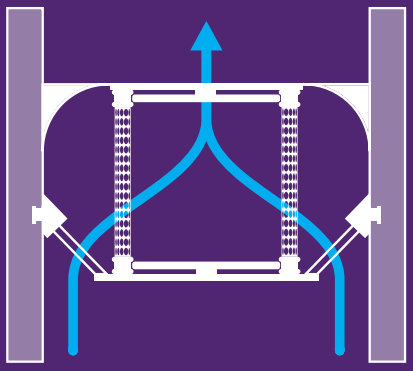
THE FUTURE IS DUAL FLOW

OVIVO'S MORE THAN **100 YEARS OF EXPERIENCE DESIGNING BAND SCREENS** FOR WATER INTAKES **CONFIRMS** THE **DUAL FLOW** (OR OUT TO IN FLOW PATTERN) IS THE **MOST SUITABLE FLOW PATTERN** FOR THE **MAJORITY OF WATER INTAKES.**

NEW DUAL FLOW:



DUAL FLOW CONVERSION:



With this pattern, water flows through the ascending and descending mesh panels where filtering is simultaneously achieved on both sides. Filtered water exits through the back opening. Debris cannot be carried over to the clean water side. The Dual Flow produces a converging flow which is preferable when the pump is in close proximity of the screen.

THE **OVIVO** DIFFERENCE

200+ YEARS OF HERITAGE • 100% FOCUSED ON WATER

OVIVO: A DESIGN PROCESS POWERHOUSE

The Ovivo Screening Team, which consists of decades of screening plant design and innovation, has provided expertise and design assistance for raw water intake plants consisting of all shapes, sizes, and materials.

ANCILLARY EQUIPMENT

Ovivo can supply all plant required equipment for a complete Screening Plant, including but not limited to:

- Coarse bar screens
- Automatic raking machines
- Isolating stopgates
- Local or centralized control systems
- Manual or automatic fine strainers
- Debris retention containers
- Cathodic protection

Screen Design Data Needed for RFQ

Project Reference Name, Site or Station				
Type of Project	New	Existing		
Screen Application	Power-Thermal	Power-Nuclear	Industrial	Other
Type of Water	Fresh	Brackish	Salt	
Type of Debris				
Existing Screens	Type	Number	Manufacturer	
Design Flow Each Screen				
Existing Mesh Aperture				
Desired Mesh Aperture				
Location – Inside/Outside				
Spray Wash Available	Volume	Pressure		
Operating Floor Elevation				
High Water Elevation				
Normal Water Elevation				
Low Water Elevation				
Channel Invert Elevation				
Channel Width (Perpendicular to Flow)				
Deck Opening Width (Parallel to Flow)				

LEARN MORE!
Scan to view online.

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