

Designed to meet the increasing demand for high capacity fine screening of raw or wastewater coupled with a robust low maintenance operation.





Utilizing Brackett Green's decades of experience, Ovivo is the world leader in screening technology. Whether your requirement is for new treatment works or to optimize an outdated screen, we can provide the right solution for you.

Brackett Green® screens have been tested at the National Screen Evaluation Facility in the UK, with excellent results. The Brackett Green CF200® band screens have proved a capture rate of 80%+, and in some cases upto 93%, with virtually no wear after an extensive testing period. Brackett Green screens are fully W.I.M.E.S compliant. All Brackett Green band screen products are manufactured to ISO9001 standards and are subjected to rigorous internal quality audits, ensuring that only the best quality screens are delivered to our clients.

The Brackett Green screens are just one of a line of successful proprietary products in Ovivo's range.

APPLICATIONS

- Sewage treatment plants
- Water reclamation facilities
- Wastewater treatment plants
- Combined storm water overflows
- Potable water treatment plants
- MBR pre-treatment



CF200® band screen Features and benefits

CENTER FLOW PATTERN

The Brackett Green® CF200® band screens utilize a center flow pattern. Research and testing have proven that the center flow pattern (where water enters the center of the screen, then flows outwards through the two sides of the moving band of patented screen panels that run parallel to the flow before discharging it to the outside of the screen and sending it downstream) is the most efficient engineering design today. Effectively reducing, eliminating and controlling both carryover and bypassing of screenings at the inlet works of a sewage treatment plant.

AN ENDLESS BAND OF SCREENING PANELS

The Brackett Green® CF200® band screen has a standard design openings along with screening panel width along with screening panel widths in increments of 500mm. Debris is elevated by means of an endless band of screening panels contained within a vertical self-supporting frame. The water being screened will pass through an opening in the front of the screen to the inside, and then through the panels to the outside of the screen. As the band rotates, the debris collected on the inside is lifted above deck level.

LOW PRESSURE JET CLEANING

The screen panels will be washed by a series of jets mounted on a jet pipe inside the screen head. The jets will be attached to the jet pipe by quick release connections for ease of cleaning. The jet pipe will be fitted with a pressure gauge and a pressure switch to detect low washwater pressure. A removable end cap is provided on the jet pipe for flushing purposes. The washwater and debris is discharged from the screen via a launder channel. Located in the hopper is a flushing pipe assembly, which aids in screenings removal. The flushing pipe is used in conjunction with the screen jet pipe and is opened with an automatic solenoid valve. The head section has removable access panels and a splashguard designed to keep aerosol from the spray jets at a minimum.

SINGLE MOTOR DESIGN

Heavy duty frames supported by two sprockets above the deck, carry the screening band. A shaft-mounted gear unit is directly keyed to the head shaft, and coupled with a flange-mounted electric motor that drives the screen. The motor comes with an anti-condensation heater. The chain assembly runs in replaceable stainless steel wear track located in a self-supporting fabricated frame. To prevent solids bypassing the CF200® band screen, a neoprene contact seal is utilized on all machines. The screen is shipped fully assembled, where size permits, ready for immediate installation. All routine maintenance is at deck level, and there are no permanently submerged bearings.



Operation

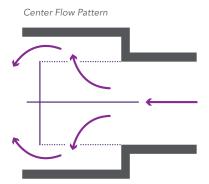
CF200® screens adopt a central flow pattern, i.e. water enters the center of the screen first. Ovivo's research has proved that the central flow pattern is the most efficient means of removing suspended solids for wastewater applications. This pattern also eliminates the problem of "carry over" found in more traditional straight-through and step type screens.

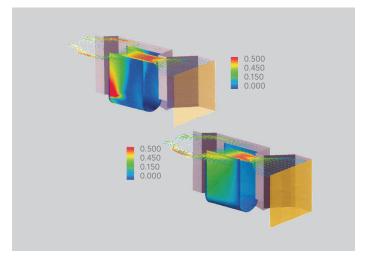
Wastewater enters through the center of the fine screen and flows outwards through a moving band of polymer mesh panels to the outside of the screen chamber. Screenings are retained on the inside of the screen panels, and are discharged by low pressure water jets at deck level during the cleaning cycle.

Water jets are mounted onto a jet pipe inside the screen head section. During the cleaning cycle these jets continuously clean the panels as they pass the discharge point above the debris hopper. A removable end cap is fitted to the jet pipe for flushing. If washwater is unavailable, a pressure switch triggers an alarm for operators to investigate and screen continues operation. On many sites the Brackett BriedenTM automatic strainer increases the screen's efficiency by reusing screened effluent as the screen washwater supply.

Brackett Green® CF200® band screens are fitted with patented tapered hole thick polymer mesh panels. Unlike steel or other metallic mesh and plates, the panels actively discourage hairpinning. These highly effective screens do not require brush cleaners, removing a source of constant problems found on alternative machines.

For some special applications the flow can be reversed, with water flowing from the outside to the center. This flow pattern, like the central flow pattern, totally eliminates "carry over" and ensures effective and efficient screening.

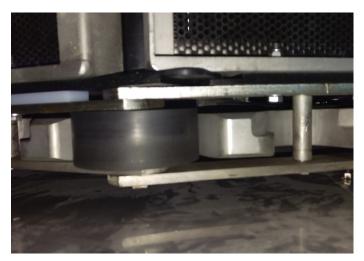




Computer generated flow velocity patterns



Heavy duty carrier chain, baskets and drive spockets



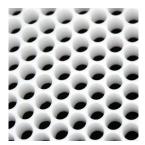
Heavy duty stainless steel carrier chain

Construction

CF200® band screens are usually delivered in one piece – this allows for ease of installation and enables the screens to be lifted into position fully assembled.

The CF200® band screen head sections are fitted with removable access panels. These can incorporate inspection windows and splash guards specially designed to reduce aerosol from the spray jets to an absolute minimum.

Ovivo designs, manufactures and installs CF200® band screen inlet structures fabricated in stainless steel, reducing civil works requirements to a minimum.



Close up of Ovivo's ProPaPanel® technology



Full contact seals for fine screening



Ovivo's ProPaPanel® technolog

Engineering services

- Computer-aided design and engineering
- Installation, commission and maintenance
- Spare Parts
- Training



Fully customizable configurations for any plant

Ovivo USA, LLC 4246 Riverboat Road, Suite 300 Salt Lake City, UT 84123

ovivowater.com

Key features







REDUCED MAINTENANCE COSTS Patented panel design eliminates hairpinning



PATENTED MESH PANELS Industry leading screenings capture



SIMPLE RETROFIT

replaces outdated step, rake and straight-through screens

