

## Brackett Green<sup>®</sup> Continuous Chain Raked Bar Screen

Simple, robust design and short cleaning cycle

### Key features & benefits

- Simple, robust and compact design
- Continuous removal of high volume small debris
- Raking beams added / removed to suit variations in debris load
- Suitable for jellyfish and seagrass removal

### How we create value

- Self-contained units can be fitted with one lift, ensuring rapid fit and minimizing installation expenditure
- High debris removal capacity within a small foot-print



# Brackett Green® Continuous Chain Raked Bar Screen

The Brackett Green Continuous Chain Raked Bar Screens (CCRBS) are suitable for coarse screening applications in sewage treatment works, cooling water intakes and storm water pumping stations.

The Brackett Green continuous chain raked bar screens provides continuous front raking of the vertical screen grid by means of horizontal raking beams, fitted with teeth. Each beam is carried on twin endless chains.

The vertical screening bars are arranged across the channel, and a flat debris plate (or, on larger machines, civil works apron wall) fits the area between the top of the bars and the debris discharge point. Each horizontal raking beam moves upwards along the bars and carries the collected debris across the flat plate to the

discharge point. At the discharge point, a wiper blade pushes the debris off the rake teeth and onto the discharge chute.

The number of raking beams fitted depends on the solids loading anticipated, but normal practice is for a second beam to engage with the bottom of the bars at around the same time as the preceding beam clears the top of the screening area.

### Heavy Duty Machines

Robust, heavy duty raking machines are available as self-contained units for the coarse screening of sewage or raw river water intake.

The bar screen angled is normally 15° from the vertical and is designed for operation in channels of between 4 and 15 meters wide.

The screening bars are made up into panels which are bolted to horizontal beams fixed across the channel. The complete unit is fixed to guides on the sides of the civil work for ease of installation and removal.

### Light Duty Machine

This machine is designed for use in smaller channels and where fine screening (down to 6mm) is required. The machine is self-contained and can be lowered into a channel. Flexible seals (provided) close the gaps between the machine and the channel walls.



Large influx of jelly fish at a power plant cooling water intake

## Features and Benefits

### The Drive Mechanism

All models are fitted with a shaft-mounted weatherproof gearbox and motor, mounted directly onto the main drive shaft. The load for the main drive shaft is carried on roller bearings in the head section of the machine frame. The bearings have adjusting screws to allow for chain tensioning.

### Overload Protection

Overload protection is provided by electronic power monitor that isolates the motor power in the event of an overload or jam.

### Raking Beams

Raking beams are bolted at each side to the roller chains and are fitted with raking teeth, profiled to engage with the screening bars. Heavy duty models feature steel raking teeth. Nylon teeth are used for fine screens where load permits.

### Debris Discharge

At the discharge point, each raking beam meets a wiper blade which moves forward across the raking teeth and pushes collected debris onto the discharge chute. The blade falls back into its starting position after the beam has passed.

Discharge may be to skip, floor channel or conveyor, as required.

### Screen Control

Screen control may be triggered by the level of liquid in the channel, the differential level drop across the screen, by timers, or by a combination of the above. Ovivo can supply any control units that may be required.

### Positive Rake Engagement

The position of the raking beams is carefully controlled to ensure proper engagement with the screen bars.

### Compact Drive Units

Shaft-mounted gear units provide compact drives on all models.

### Clean Discharge

The wiper blade ensures that all debris is removed from the rakes.

### Self-contained

The Brackett Green continuous chain raked bar screen requires minimal civil works and can be positioned directly into an existing channel in one lift.

For maintenance purposes, the screen can be completely withdrawn in one piece.

### Ancillary Equipment

Ovivo can supply all the plants needed for a complete screening installation, including:

- Coarse bar screens
- Mechanically raked bar screens
- Rotating drum screens
- Travelling band screens
- Fine screens
- Screenings handling systems
- Washwater pumps and pipework
- Screw compactors
- Control equipment
- Installation and commissioning



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