

Heliscreen®

High performance, low-footprint combined sewer overflow screening

Product Summary

The Heliscreen® is a compact, powered combined sewer overflow and wet weather screening system that screens litter, gross solids and floatables with high efficiency under high flow, surcharged and submerged conditions.

With low headloss, a small footprint and minimal maintenance requirements, the Heliscreen® is ideal for retrofit installations with hydraulic or physical site constraints.

Applications

- » New and retrofit CSO or SSO facilities.
- » Sites constrained by hydraulic levels or chamber dimensions.
- » Remote sites or facilities with low maintenance requirements.
- » Storm screen for storm tank application.

Product Information

- » All screenings removed are retained on the foul side of the overflow weir.
- » Handles high concentrations of screenings.
- » Self cleansing.
- » Low headloss.
- » Compact design.
- » 6 mm in two direction screening, compliant with WIMES requirements.
- » Operates under surcharged conditions.
- » Easy to install and maintain.

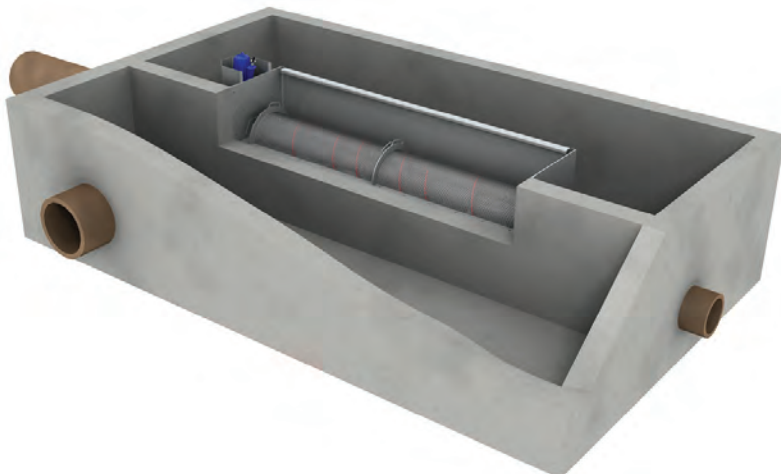


Fig.1 Heliscreen® installed in a CSO chamber

Technical Information

- » Screen diameters available: 300 mm, 500 mm, 700 mm, 1000 mm.
- » Screen lengths available: minimum 1.5 m, maximum 3.5 m (screens available in 0.5 m increments).
- » Maximum recommended loading rate of 350 l/s/m².
- » Requires 380-415v 3-phase power supply.
- » Unit diameters of 300 mm or 500 mm use a 0.75 kw motor.
- » Unit diameters of 700 mm or 1000 mm use a 1.5 kw motor.

Benefits

Get high-performance screening under challenging conditions

Maintains high efficiency operation under high flows, submerged and surcharged conditions, retaining 100% of screenings on the sanitary side of the overflow weir. It avoids contributing to a CSO surcharge by bypassing excess flow while still screening what is not bypassed.

Design flexible CSO screening systems

The small and efficient design enables a variety of installation configurations. Units may be installed in series or in parallel, and both immersible electric or hydraulic motors are available, providing designers with a range of options to meet site-specific CSO screening requirements.

Increase performance without adding maintenance

Self-cleaning, self-activating and corrosion resistant, the Heliscreen® is continually flushed clean to ensure that the foil does not blind and that flow is discharged freely, minimising maintenance and making it an ideal solution for remote or low-maintenance CSO sites. As the screen overhangs the main throughflow channel, any required maintenance can be undertaken from the dry side of the weir.



CSO Solutions

→ hydro-int.com/heliscreen

How it works

1. During dry weather, flows pass through the chamber unhindered by the Heliscreen® until a storm events begins.
2. As water levels rise, the rotation of the helical brush mechanism is initiated.
3. The rotating helical brush scrubs solids away from the screen and into the continuation flow while the effluent is discharged to a spillway. The screenings and continuation flow are carried on for further treatment.
4. As the water level continues to rise, spill flow and continuation flow pipes become surcharged. Flows in excess of design flow are bypassed over the back plate/emergency overflow weir. Unlike most CSO screens, the powered motor of the Heliscreen® sits above the back plate to ensure that the device will continue to operate even in the event of surcharges.

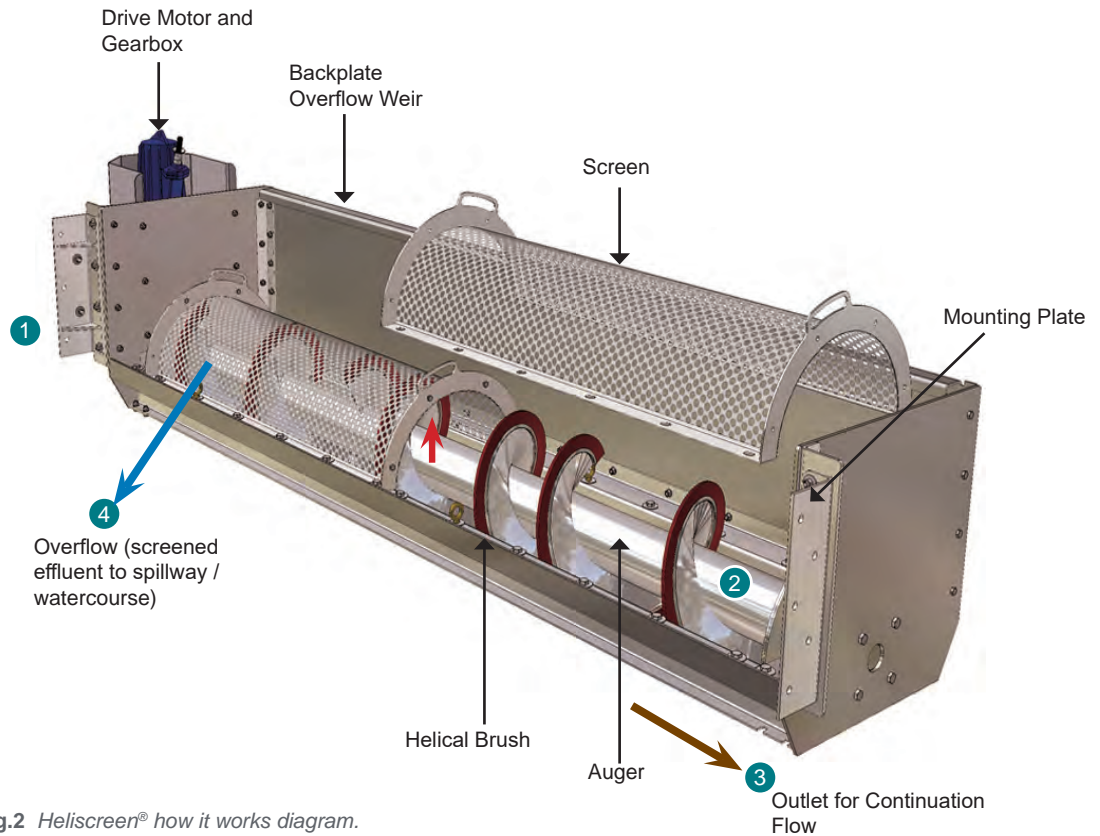


Fig.2 Heliscreen® how it works diagram.

Make it Smart:

Add Hydro-Logic® Event Duration Monitoring, for data and alerts on the status of your CSO.



Hydro International
Unit 2, Rivermead Court, Kenn Business Park
Windmill Road, Clevedon, BS21 6FT
Tel: +44 (0)1275 878371
Email: wastewatersolutions@hydro-int.com
Web: hydro-int.com

Patent: www.hydro-int.com/patents

To find out how the Heliscreen® can help you effectively screen storm overflow discharges and protect the water environment call 01275 878371 or visit:

→ hydro-int.com/heliscreen