

Screen CSO flows in a small footprint, maintaining high treatment efficiency even under surcharged and submerged conditions

The Heliscreen® is a compact, powered combined sewer overflow and wet weather screening system that screens trash, 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 of SSO facilities.
- Sites constrained by hydraulic levels or chamber dimensions.
- Remote sites or facilities with low maintenance requirements.
- Storm screen for storm tank applications.

Performance

- Screen diameters available: 300 mm, 500 mm, 700 mm, 1000 mm.
- Screen lengths available: minimum 1.5 m, maximum 7.0 m (screens available in 0.5 m increments up to 4.0 m, then in 1.0 m increments from 4.0 m to 7.0 m).
- Maximum recommended loading rate of 350 l/s/m².
- Requires 380-415v 3-phase power supply.
- Unit diameters up to 3.5 m in length use a 0.75 kw motor.
- Unit diameters greater than 3.5 m in length use a 1.1 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

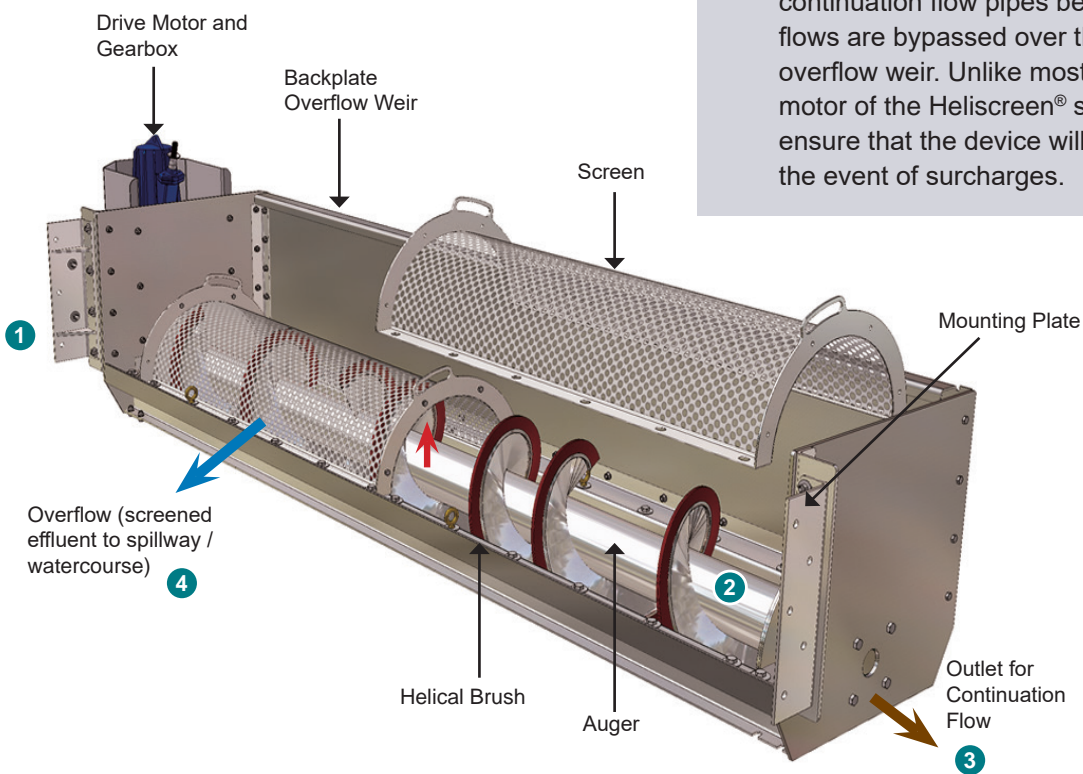
Self-cleaning, self-activating and corrosion resistant, the Heliscreen® is continually flushed clean to ensure that the foil does not blind and that flow is discharged freely, minimising maintenance and making it an ideal solution for remote or low-maintenance CSO sites. As the screen overhangs the main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

Product Information

- 100% of screenings 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.
- Operates under surcharged conditions.
- Easy to install and maintain.

How it works

1. Water flows into the chamber and begins to flow through the Heliscreen® unit's semi-cylindrical stainless steel perforated screen.
2. Water levels in the chamber rise, initiating the rotation of a helical brush mechanism on the influent side of the screen.
3. The spinning 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. Excess flows 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.



Make it Smart:

Add Hydro-Logic® Event Duration Monitoring, telemetry and alerts to help you make better water decisions.

Learn more

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