Heliscreen®

Compact Powered CSO Screening System

*Maintains **high screening efficiency** under surcharged conditions.*

Product Profile

The Heliscreen® is a compact powered CSO screen with the ability to operate under surcharged conditions. With low headloss and a small footprint, the Heliscreen® is ideal for retrofit installations with hydraulic or physical site constraints.

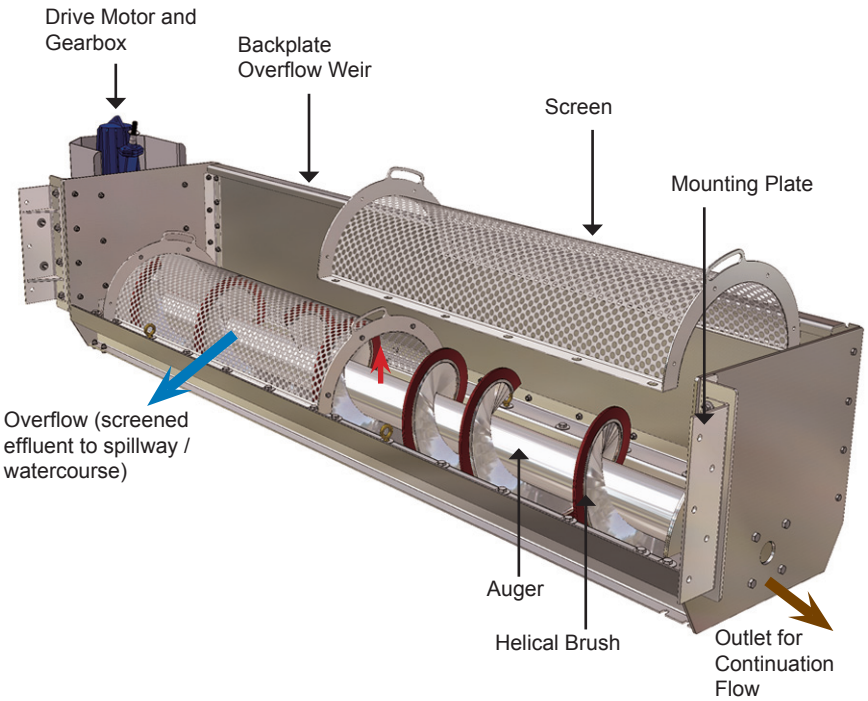
Advantages

- 100% of screenings are retained on the foul side of the overflow weir.
- 6 mm in two direction screening.
- Operates under surcharged conditions.
- Low headloss.
- Compact design.
- Handles high concentrations of screenings.
- Self-cleansing.
- Easy to install and maintain.

Applications

- New CSO facilities.
- CSO retrofit.
- Storm screen for storm tank applications (before or after storm tank).
- Sites constrained by hydraulic levels or chamber dimensions.
- Facilities with low maintenance requirements.

How it works



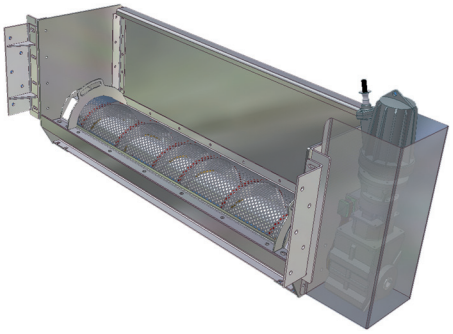
Flows enter the chamber causing water levels to rise, initiating the rotation of the helical brush mechanism on the influent side of the screen, and begins to flow through the Heliscreen®'s semi-cylindrical stainless steel perforated screen (red arrow).

The spinning helical brush scrubs solids away from the screen and into the continuation flow while the effluent is discharged over the weir to the spillway (blue arrow). The screenings and continuation flow are carried on to the wastewater treatment plant for treatment (brown arrow).

As the water level continues to rise, spill flow and continuation flow pipes may become surcharged. Excess flows are bypassed over the back plate overflow weir. The powered motor of the Heliscreen® is Zone 1 rated IP68 to ensure that, unlike most CSO screens, the device will continue to operate even in the event of surcharges.

Design

Versatile and adaptable, the Heliscreen® is available in standard diameter sizes of 300 mm, 500 mm, 700 mm and 1000 mm.



Configurations

The versatility of the Heliscreen® allows for units to be installed in parallel or in series to accommodate any flow requirements.

Sizing Data

300 mm Diameter

Screen Length	1.5 m	2.0 m	2.5 m	3.0 m	3.5 m
Plan Area	550 mm x 2500 mm	550 mm x 3000 mm	550 mm x 3500 mm	550 mm x 4000 mm	550 mm x 4500 mm
Maximum Spill Flow	241 l/s	321 l/s	401 l/s	481 l/s	561 l/s

500 mm Diameter

Screen Length	1.5 m	2.0 m	2.5 m	3.0 m	3.5 m
Plan Area	750 mm x 2500 mm	750 mm x 3000 mm	750 mm x 3500 mm	750 mm x 4000 mm	750 mm x 4500 mm
Maximum Spill Flow	401 l/s	535 l/s	668 l/s	802 l/s	935 l/s

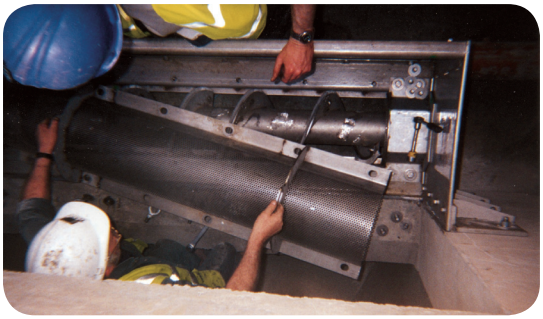
700 mm Diameter

Screen Length	1.5 m	2.0 m	2.5 m	3.0 m	3.5 m
Plan Area	950 mm x 2500 mm	950 mm x 3000 mm	950 mm x 3500 mm	950 mm x 4000 mm	950 mm x 4500 mm
Maximum Spill Flow	561 l/s	748 l/s	935 l/s	1122 l/s	1310 l/s

1000 mm Diameter

Screen Length	1.5 m	2.0 m	2.5 m	3.0 m	3.5 m
Plan Area	1250 mm x 2500 mm	1250 mm x 3000 mm	1250 mm x 3500 mm	1250 mm x 4000 mm	1250 mm x 4500 mm
Maximum Spill Flow	802 l/s	1069 l/s	1336 l/s	1604 l/s	1871 l/s

Maintenance



The internal components of the Heliscreen are mounted on the ‘wet’ (sewer) side of the weir. The main components are easily accessible from the ‘dry’ side for maintenance or inspection.

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