

# Heliscreen<sup>®</sup> Compact Powered Wet Weather Screening System

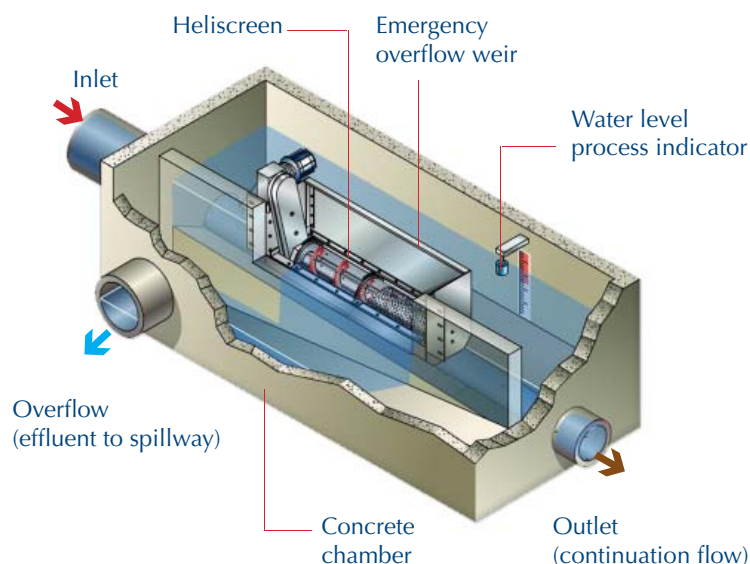
Maintains *high screening efficiency* even under surcharged and submerged conditions

## APPLICATIONS

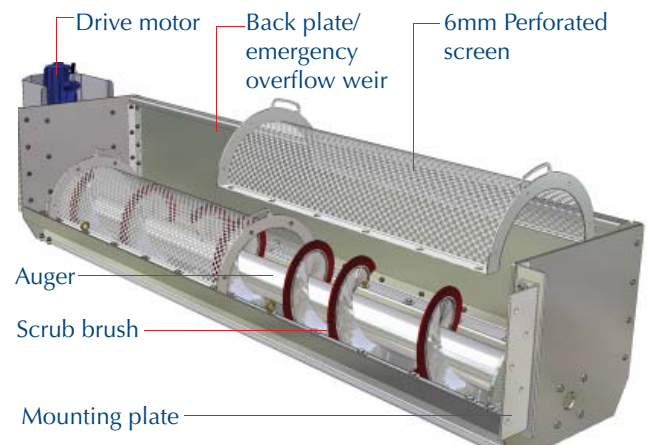
- Floatables screening for CSOs and SSOs
- New and retrofit facilities
- Sites constrained by hydraulic levels or chamber dimensions
- Facilities with low maintenance requirements

## ADVANTAGES

- 100% of screenings retained on the sanitary side of overflow weir
- Operates under surcharged and submerged conditions
- Low headloss
- Compact design
- Handles high concentrations of screenings down to 6mm in diameter
- Self-cleansing
- Easy to install and maintain



The Heliscreen is a compact powered CSO screening system 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.



## HOW IT WORKS

Water flows into the chamber (red arrow) and begins to flow through the **Heliscreen's** semi-cylindrical stainless steel perforated screen.

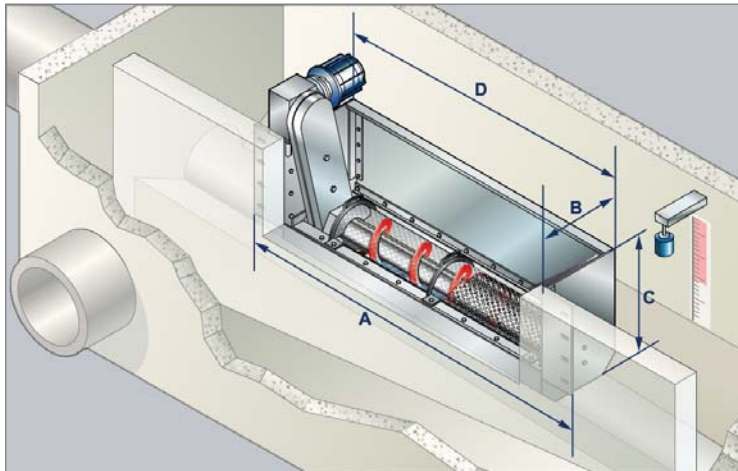
Water levels in the chamber rise, initiating the rotation of a helical brush mechanism on the influent side of the screen. The slowly rotating helical brush scrubs solids away from the screen and into the continuation flow while the effluent is discharged to a spillway (blue arrow). The screenings and continuation flow are carried on for further treatment (brown arrow).

As the water level continues to rise, spill flow and continuation flow pipes may become surcharged. Under extreme flow conditions excess flows are bypassed over the back plate/emergency overflow weir. Unlike most CSO screens the powered motor of the **Heliscreen** sits above the level of the back plate to ensure that the device will continue to operate even in the event of surcharges.



### Maintenance

The internal components of the Heliscreen are mounted on the “wet” (sewer) side of the weir. The components are easily accessible for maintenance in the event of ragging or blockage.



### Design

Versatile and adaptable, the Heliscreen is available in standard sizes with 12, 20, 28 and 40 inch diameter augers. Lengths can vary from 5 - 23 ft. while widths range from 21- 50 in.

### Configurations

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

### Sizing

The Heliscreen is sized for the typical design loading rate of 440 gpm/ft<sup>2</sup> (300 l/s/m<sup>2</sup>). Refer to the Heliscreen Sizing Chart for typical flow based sizing details. Other sizes are available upon request.

### Heliscreen Sizing Chart

Flow		Model Auger Diameter x Auger Length (in)	Dimensions (ft.)			
MGD	cfs		A	B	C	D
2	4	12 x 60	7.8	1.8	2.6	6.3
6	10	12 x 80	9.5	1.8	2.6	8.1
11	18	12 x 140	14.5	1.8	2.6	13.0
23	35	12 x 280	28.3	1.8	2.6	26.9
34	53	20 x 240	25.1	2.5	2.6	23.6
46	71	28 x 240	25.1	3.1	2.9	23.6
57	88	28 x 280	28.3	3.1	2.9	26.9
68	106	40 x 240	25.1	4.1	2.9	23.6
80	124	40 x 280	28.3	4.1	2.9	26.9

For more information please call our office toll free at 800.848.2706 or inquire at [www.hydro-international.biz](http://www.hydro-international.biz).

This information is subject to change without notice.

