

Hydro-Static® Screen

Screen gross solids and floatables at CSO sites with infrequent overflows

Product Summary

The Hydro-Static® Screen provides economical combined sewer overflow screening at sites with infrequent overflows.

Available in two configurations that provide effective removal of gross solids and floatables, the Hydro-Static® Screen has no moving parts, requires little maintenance and can be supplied in a precast concrete chamber, delivering effective pollution capture for sites with lower flows and operators with smaller budgets.

Though overflows may be infrequent, when they occur they are still damaging to the environment. The Hydro-Static® Screen offers an economically sustainable screen for combined sewer overflow sites with infrequent overflows, but at which environmental protection is still a concern.

Applications

- » CSO sites with infrequent spills.
- » Floatables control within collection systems.
- » Retrofits or new CSO screening facilities.
- » Storm tank and pumping station overflows.

Benefits

Get economical, effective CSO screening

The Hydro-Static® Screen provides effective gross solids and floatables capture and works with small flows and small budgets. Mesh screen panels are coated in a non-stick polymer and corrugated to increase flow-through capacity.

Minimise maintenance requirements

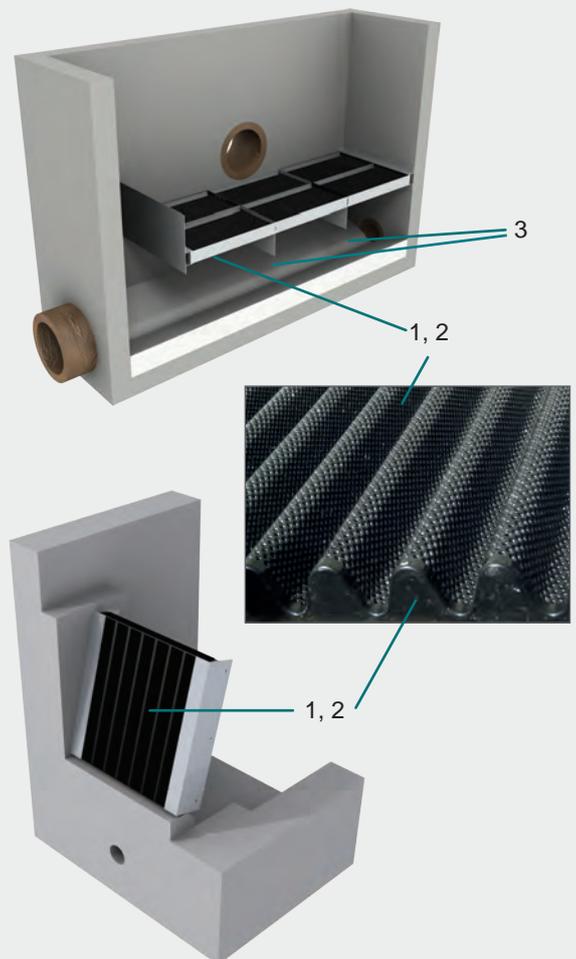
The Hydro-Static® Screen has no moving parts and requires no power to operate. In up flow applications, patented, flow modifying components can be included that provide partial cleansing, reducing maintenance costs. The non-stick polymer coating on the screens makes them easier to keep clean.

Install quickly and easily

The modular design enables swift installation and the ability to retrofit into existing chambers whatever the shape and size.

Main Features

1. Corrugated mesh screen panels for increased flow-through capacity
2. Non-stick polymer coated mesh screen panels.
3. In up flow applications, patented, flow modifying components can be included that provide partial cleansing, reducing maintenance costs.

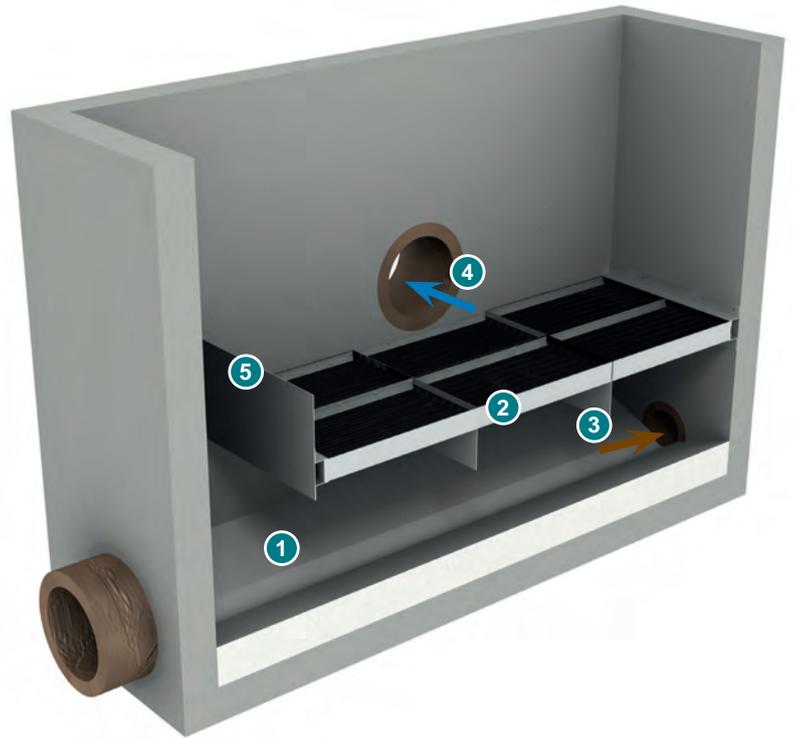


Performance

- » Recommended design loading range of 50-100 l/s/m² (nominal value: 75 l/s/m², based on a 50% blinding factor).
- » Headloss at nominal 75 l/s/m² = 55mm.
- » Screen weight of standard panel (1.215 x 0.641 m) is 20 kg (25.64 kg/m² of plan area).

How it works

- 1) During dry weather conditions the flow to the treatment works will pass underneath the screens in the dry weather flow channel.
- 2) In a storm event the inflow rate to the chamber will exceed the outflow rate causing water levels to rise within the chamber and spill through the screens.
- 3) The Hydro-Static® Screen is mounted over the dry weather flow channel so that the flow passes up and through the screen during a storm event. Solids and floatables are trapped below the screen and returned to the sanitary continuation flow (brown arrow).
- 4) Screened effluent is discharged to a receiving waterway (blue arrow).
- 5) An emergency overflow weir is incorporated into the screen should the peak design flow be exceeded.



Make it Smart:

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



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Hydro-Static® is a registered trade mark of CRH Group Services Limited

Patent: www.hydro-int.com/patents

To find out how the Hydro-Static® Screen can economically help you remove solids from CSO discharges and help protect the environment call 01275 878371 or visit:

→ hydro-int.com/hydro-static-screen