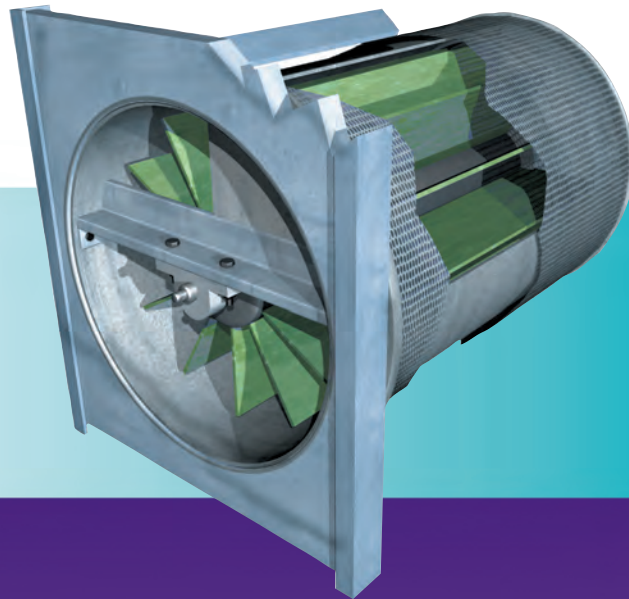


# Cyclone

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**Patented, self-powered drum screen ideal for treating small combined sewer overflows**



# Cyclone

## PROCESS DESCRIPTION

Manufactured from 316L or 304L stainless steel, then electro-polished, the Cyclone bolts directly to a chamber wall over the outlet, or spans across the CSO chamber from weir wall to chamber wall.

The shaft bearings are also stainless steel and are sealed for life. Drum sizes are up to 25 inches in diameter and 42 inches long. Cyclone applications include storm water tank discharges, pumping station overflows, sewage treatment plant by-passes, and combined sewer overflows.

1. The Cyclone begins operating when the water level reaches the shaft level.
2. Water flows over an overflow weir created by an the open quadrant in the inner (fixed) drum. Screened effluent flows onto internal vanes that are attached to the perforated (outer) drum, causing the drum to rotate.
3. As the flow increases, the water level over the weir rises, creating a greater inflow screen area and increasing the screen throughput.
4. The patented screen uses the available energy of overflow through its internal water wheel to effect self-cleansing. The drum rotates faster, increasing the shear action and improving the cleansing action.
5. The high shear action between the drum face and surrounding water causes screenings attached to the outside of the drum to be stripped from the screen face.
6. The unit is self-regulating across the full range of flows.
7. The drum continues to operate at maximum inflow even if the unit becomes completely submerged.

## ADVANTAGES

- Virtually maintenance free
- Requires no mechanical cleansing of the screen surface and no external power source
- The 6 mm aperture screen is self-cleansing
- Whether installed individually or in multiples, the Cyclone can be designed with quick release fittings and frames for easy removal and access to the CSO chamber
- Ideal for treating small combined sewer overflows
- Simple, rapid installation

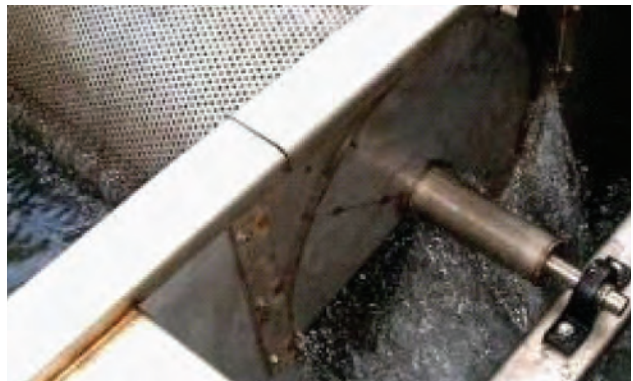
## PERFORMANCE

The Cyclone achieves:

- 100% removal of 6 mm particles for two dimensions
- Design now in three sizes: 1.77 cfs (50 l/s), 1.1 mgd; 3.53 cfs (100 l/s), 2.3 mgd; and 5.30 cfs (150 l/s), 3.4 mgd
- Head over the internal weir of 10 to 12 1/2 inches maximum

## MAINTENANCE

Designed to be virtually maintenance free, the Cyclone has a projected 20-year life. PWTech suggests an annual inspection to ensure that the drum is clean and rotating freely.



The Cyclone can be used in a wide variety of projects to meet time-sensitive requirements for CSO pollution prevention.

**Available in your area from:**

