HYDROCHAIN™ PRIME SEPARATOR

HYDRODYNAMIC TECHNOLOGY FOR ADVANCED STORMWATER MANAGEMENT

The physical technology of the HydroChain Prime Separator removes sediment, solids and heavy metals from stormwater runoff. Most contamination in stormwater is carried by fine particles. Unlike treatment systems that reduce only sand fractions, the separator reduces both silt and sand fractions.

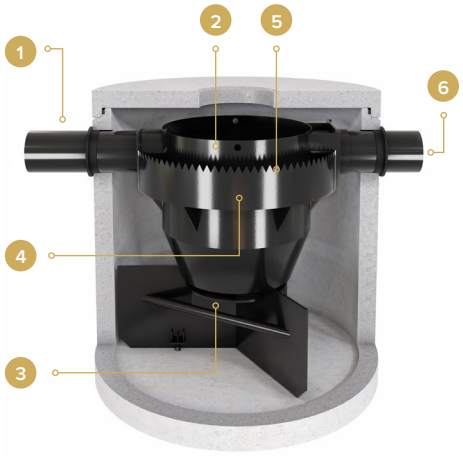
The HDPE unit's inner cylinder separates the water to be treated from floatable materials such as plastic bottles, cans, oil and pollen. The separator is designed to prevent resuspension of sediment.

PROTECTING THE ENVIRONMENT

Stormwater runoff is a significant cause of water pollution. Engineered to meet the most stringent North American and global standards, this separator removes contaminants and produces water clean enough to re-enter surface water, waterways and groundwater infiltration systems. The following certifications and approvals are in process:

- NJ Corporation for Advanced Technology (NJCAT)
- NJ Department of Environmental Protection (NJDEP)
- WA Department of Ecology (WADOE)

HOW THE HYDRODYNAMIC PRIME SEPARATOR WORKS



NOTE: This shows the Prime Separator in a concrete manhole. It is also available in a fiberglass manhole.

1. Stormwater flows through the inlet pipe into the center of the separator and a deflector plate creates a radial flow pattern.
2. Solids sink to the bottom of the manhole or tank and floatable matter remains on the surface of the water.
3. Solids collect in the manhole or tank bottom, which is separated hydraulically from the treatment funnel by flow breakers (panels) and a grate. Suspended and settled solids are periodically cleaned out.
4. Cleaned water flows evenly upward, along the outer walls of the prime separator.
5. Cleaned water flows over a serrated weir into a channel.
6. The cleaned water flows out of the separator through the outlet pipe.

Maximum treatment levels

up to 7.0 cubic feet / 200 liters per second

Sediment storage capacities

up to 6.5 cubic yards / 5.0 cubic meters

Oil/debris storage capacities

up to 830 gallons / 3,140 liters

Installed in manholes, tanks or vaults

that are designed to withstand H-25/HS-25 axle loads

Available in models that fit

common manhole sizes up to 10' dia.

COMPOSITE PRODUCTION SYSTEMS | **watersales@shawcor.com**

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