DUAL-VORTEX Separator

Enhanced Gravity Separation of Stormwater Pollutants in a Compact Configuration

Dual-Vortex Efficiency

- Particle settling is enhanced by circular flow patterns and a highly circuitous flow path created by two independent vortex cylinders.
- Settled particles are collected in the isolated bottom storage area, while floating trash, debris and petroleum hydrocarbons are retained in the cylinders and upper storage areas.
- During peak events, flows in excess of design treatment overtop the bypass weir and exit the system without entering the cylinders and lower storage area, thereby eliminating re-entrainment issues.

FEATURES:
- Maintenance Accessible Design
- Economical Installation
- Access Options
- Online System Capability
- Durable Construction
- Proven Performance
- Treatment Train

BENEFITS:
- Open access to accumulated floatables and sediment storage area
- Provided as compact round or square manholes or small vaults
- Multiple access options (manhole cover or optional hinged lid)
- Internal high-flow bypass provides for online or offline configurations
- Stainless-steel components installed in a reinforced concrete structure
- Third party tested and certified
- Can be installed upstream of infiltration, detention and retention systems or other treatment BMP’s
Dual-Vortex Separator Offers an Innovative, Economical Alternative for Removal of Suspended Pollutants from Stormwater Runoff

How it Works

STEP 1
Independent Vortex Cylinders & Control Weir - Flows are directed to the two independent vortex cylinders where particle settling is enhanced by circular flow patterns.

STEP 2
Captured Floatables - Floating trash, debris and petroleum hydrocarbons accumulate at the top of the two cylinders where they are held until transfer into the upper storage area by peak storm events.

STEP 3
Removal of Total Suspended Solids (TSS) - Particle settling is enhanced by the circular flow patterns and a highly circuitous flow path created by two independent vortex cylinders. Sediments are collected and retained in the isolated bottom storage area.

STEP 4
High-Flow Bypass - Flows in excess of the design treatment overtop the bypass weir and exit the system without entering the cylinders and re-entraining captured pollutants.

MODELS AND NOMINAL DIMENSIONS

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Structure Diameter (ft.)</th>
<th>Standard Sump Depth* (ft.)</th>
<th>Minimum Rim to Invert Depth (ft.)</th>
<th>Sediment Storage* (cubic feet)</th>
<th>Oil and Floatable Storage (cubic feet)</th>
<th>NJCAT Treatment Flow Rate (cfs)</th>
<th>Maximum Treatment Flow Rate (cfs)</th>
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<tr>
<td>DVS-36</td>
<td>3</td>
<td>4.5</td>
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*Depth of unit can be increased to add storage capacity.

Available Options

Flume inlet control for grated inlet applications.

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