



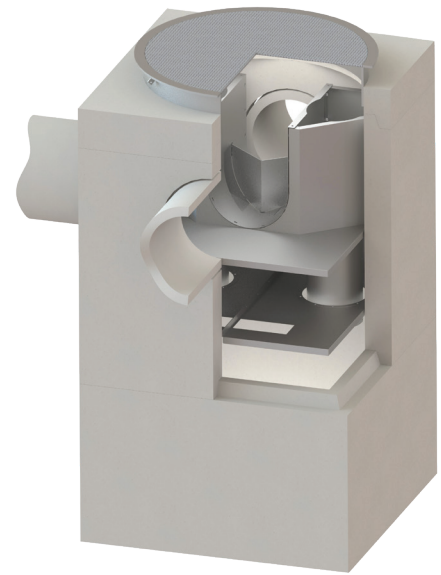
STORM WATER

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

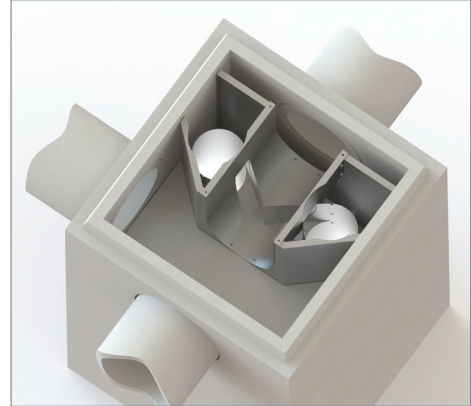
Captured Floatables - Floating trash, debris and petroleum hydrocarbons accumulate at the top of the two cylinders where they are held until transfer into the upper storage area by peak storm events.

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

Model No.	Structure Diameter (ft.)	Standard Sump Depth* (ft.)	Minimum Rim to Invert Depth (ft.)	Sediment Storage* (cubic feet)	Oil and Floatable Storage (cubic feet)	NJCAT Treatment Flow Rate (cfs)	Maximum Treatment Flow Rate (cfs)
DVS-36	3	4.5	2.5	11	6	0.56	0.56
DVS-48	4	5.0	3.0	19	15	1.00	1.25
DVS-60	5	5.5	3.5	29	29	1.56	2.50
DVS-72	6	6.5	4.5	42	49	2.25	4.25
DVS-84	7	7.0	5.0	58	79	3.06	6.50
DVS-96	8	8.0	5.5	75	116	4.00	9.50
DVS-120	10	10.0	7.0	118	226	6.25	16.80
DVS-144	12	11.5	8.0	170	388	9.00	26.40

*Depth of unit can be increased to add storage capacity.

Available Options

Flume inlet control for grated inlet applications.

