

# VORTSENTRY™ HS

Engineered performance and installation simplicity

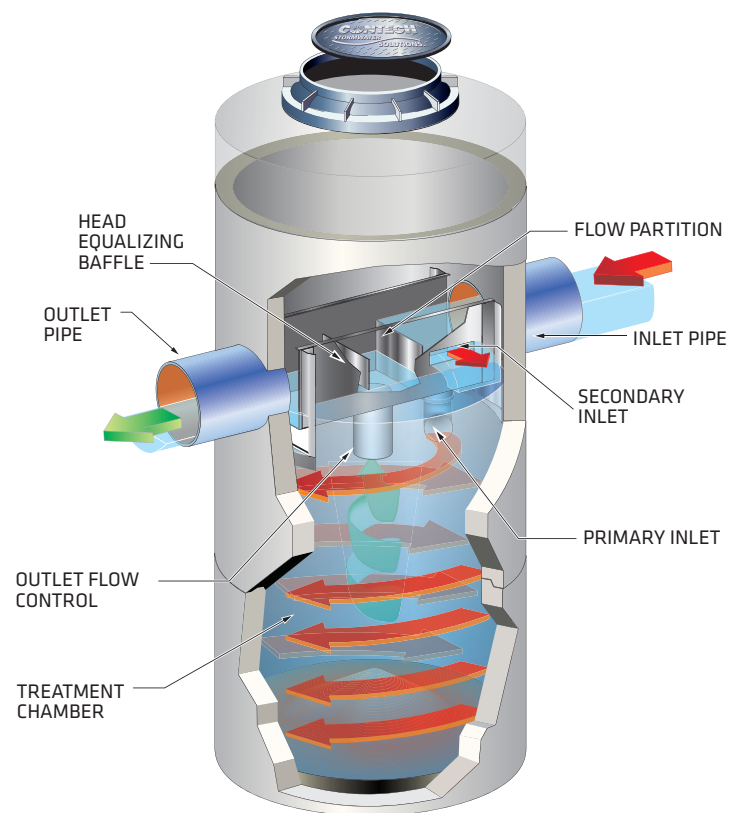
The VortSentry HS system employs a helical flow pattern that enhances containment of pollutants and provides effective removal of settleable solids and floating contaminants from urban runoff. With the ability to accept a wide range of pipe sizes, the VortSentry HS can treat and convey flows from small to large sites. A unique internal bypass design means higher flows can be diverted without the use of external bypass structures.

The design of the VortSentry HS minimises adverse velocities and turbulence in the treatment chamber. This helps to prevent washout of captured pollutants even during peak conditions. The VortSentry HS is also available in a grate inlet configuration, which is ideal for retrofits.

## HOW DOES VORTSENTRY HS WORK?

Low, reactive storm flows are directed into the treatment chamber through the primary inlet. The tangentially oriented downward pipe creates a swirling motion in the treatment chamber that increases capture and containment. Moderate storm flows are directed into the treatment chamber through the secondary inlet, which allows for capture of floating trash and debris. The secondary inlet also provides for treatment of higher flows without significantly increasing the velocity or turbulence in the treatment chamber. Settleable solids and floating pollutants are captured and contained in the treatment chamber.

Flow exits the treatment chamber through the outlet flow control, which controls the amount of flow that is treated and maintains the helical flow pattern developed within the treatment chamber. Flows exceeding the system's rated treatment flow are diverted away from the treatment chamber by the flow partition. Internal diversion of high flows eliminates the need for external bypass structures. During bypass, the head equalising baffle applies head on the outlet flow control to limit the flow through the treatment chamber. This prevents re-suspension of captured pollutants.



## VORTSENTRY HS BENEFITS:

- Helical flow pattern enhances trapping and containment of pollutants
- High treatment and bypass capacities
- Compact footprint ideal for congested sites
- Lightweight design easy to install
- Available in both inline and grate inlet configurations
- Quick manufacturing turnaround time

## CUSTOMER SUPPORT

### INSTALLATION

Stormwater360 products are some of the easiest to install in the industry. We provide comprehensive installation details and instructions, as well as full technical support on every project.

### MAINTENANCE

Maintenance of Stormwater360 products is cost effective, straightforward and efficient. We offer a complete range of services that can be tailored to your specific site needs.

### SUPPORT

- Drawings and specifications are available upon request
- Site-specific design support is available from our engineers.

### AVAILABLE MODELS

VORTSENTRY™ HS	Swirl Chamber Diameter	Typical Depth \ Below Invert	Water Quality Flow <sup>1</sup> 240 µm	Max. Size Inlet/Outlet	Sediment Storage
	m	m	L/s	mm	m <sup>3</sup>
HS09*	0.9	1.7	15.6	460	0.4
HS12	1.2	2.1	34.0	600	0.7
HS15	1.5	2.4	62.3	760	1.1
HS18	1.8	2.8	104.8	900	1.6
HS21*	2.1	3.2	158.6	1050	2.1
HS24*	2.4	3.5	229.4	1200	2.8

\* Models may not be manufactured in your area. Check with your local representative for availability.

1. Water Quality Flow is based on 80% removal for a particle size distribution with an average particle size of 240 microns.

This flow also represents the maximum flow prior to which bypass occurs.

Notes: Systems can be sized based on a water quality flow or on a net annual basis depending on the local regulatory requirement.

When sizing based on a water quality storm, the required flow to be treated should be equal or less than the listed water quality flow for the selected system. Systems sized based on a water quality storm are generally more conservatively sized.

Additional particle size distributions are available for sizing purposes upon request.

Depth below invert is measured to the inside bottom of the system. This depth can be adjusted to meet specific storage or maintenance requirements.

Contact our support staff for the most cost effective sizing for your area.

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