



## Features

- Wide range of models and capacities available
- Customizable design to adapt to jobsite configuration
- Prepacked system for easy installation
- Oil removal through patented coalescing media
- Simple maintenance
- Coating options available for different environmental conditions
- Low and high flow capabilities



## Stormwater Treatment

The StormTrooper<sup>®</sup> is the most advanced stormwater hydrodynamic separator (HDS) on the market. The StormTrooper<sup>®</sup> utilizes patented technology to remove sediments, trash, and oil from stormwater runoff. With thousands of installations worldwide, engineers rely on and include the StormTrooper<sup>®</sup> in their Stormwater Water Quality (SWQ) plan as required by EPA Clean Water Act.

Stormwater runoff from urban areas carries pollutants and trash into the storm drainage system. Unlike sanitary sewer water, stormwater typically receives little treatment. Polluted stormwater eventually drains into public waterways, rivers, aquifers, lakes, and oceans. The pollutants include trash, debris, sediment, and hydrocarbons which could be harmful to the environment, both biologically and aesthetically.



**SW** | STORMTROOPER  
Standard



### Normal Runoff Flow

Stormwater enters the StormTrooper through the control manhole with one or multiple inlets and/or a grate inlet. The inlet invert guides the treatment flow into the interceptor's first chamber where the water velocity is significantly reduced, creating non-turbulent conditions. Here, buoyant materials rise to the surface and heavy solids start to settle. As the water flows to the second compartment, it must travel through coalescent media where hydrodynamic coalescence occurs. During this laminar flow period, hydrocarbons separate and rise to the upper region of the interceptor. Sediment particles do the opposite, as they are separated and sink to the interceptor bottom region. All pollutants remain in these lower and upper regions, where they are securely detained until they are removed during maintenance. The water exits the interceptor to the control manhole's outlet compartment and then continues to the storm sewer.

### How it Works

The function of the StormTrooper® system is to intercept free oils and sediments from stormwater runoff and retain them for periodic removal. Each system is designed for a rated flow rate capacity of stormwater, known as the initial "first-flush" flow of a storm event. This first-flush will contain the majority of the pollutants washed from the catchment areas. Runoff can range from low to very high flow rates. High flows can be detrimental to stormwater treatment devices in that excessive flows tend to scour and resuspend the existing retained pollutants left from the previous storm event. The StormTrooper® utilizes engineered bypass features to handle excessive flows, permitting only the design flow through the interceptor while bypassing high flows to the storm sewer.

Visit [stormtrooper.parkusa.com](http://stormtrooper.parkusa.com) for more information and design assistance.

To request a quote or catalog, visit [request.parkusa.com](http://request.parkusa.com).

### High Runoff Flow

The StormTrooper has a flow limiter which ensures that the rated flow capacity is not exceeded through the interceptor. During high flow, runoff enters the control manhole where water builds and rises in the control manhole's inlet compartment. The excess runoff that does not flow into the interceptor will flow through a trash screen and over the bypass weir. In the control manhole's second compartment, the bypassed flow and the treated flow from the interceptor merges and then exits to the storm sewer.

## APPLICATIONS



Good to use  
in BMPs



Industrial



Parking Lots  
Streets & Highways



Low Impact  
Development



Green  
Infrastructure