

# SciCloneX<sup>®</sup> Hydrodynamic Separator



# The experts you need to solve your stormwater challenges



**Contech is the leader in stormwater solutions, helping engineers, contractors and owners with infrastructure and land development projects throughout North America.**

With our responsive team of stormwater experts, local regulatory expertise and flexible solutions, Contech is the trusted partner you can count on for stormwater management solutions.

## Your Contech Team



### **STORMWATER CONSULTANT**

*It's my job to recommend the best solution to meet permitting requirements.*



### **STORMWATER DESIGN ENGINEER**

*I work with consultants to design the best approved solution to meet your project's needs.*



### **REGULATORY MANAGER**

*I understand the local stormwater regulations and what solutions will be approved.*



### **SALES ENGINEER**

*I make sure our solutions meet the needs of the contractor during construction.*

**Contech is your partner in stormwater management solutions**



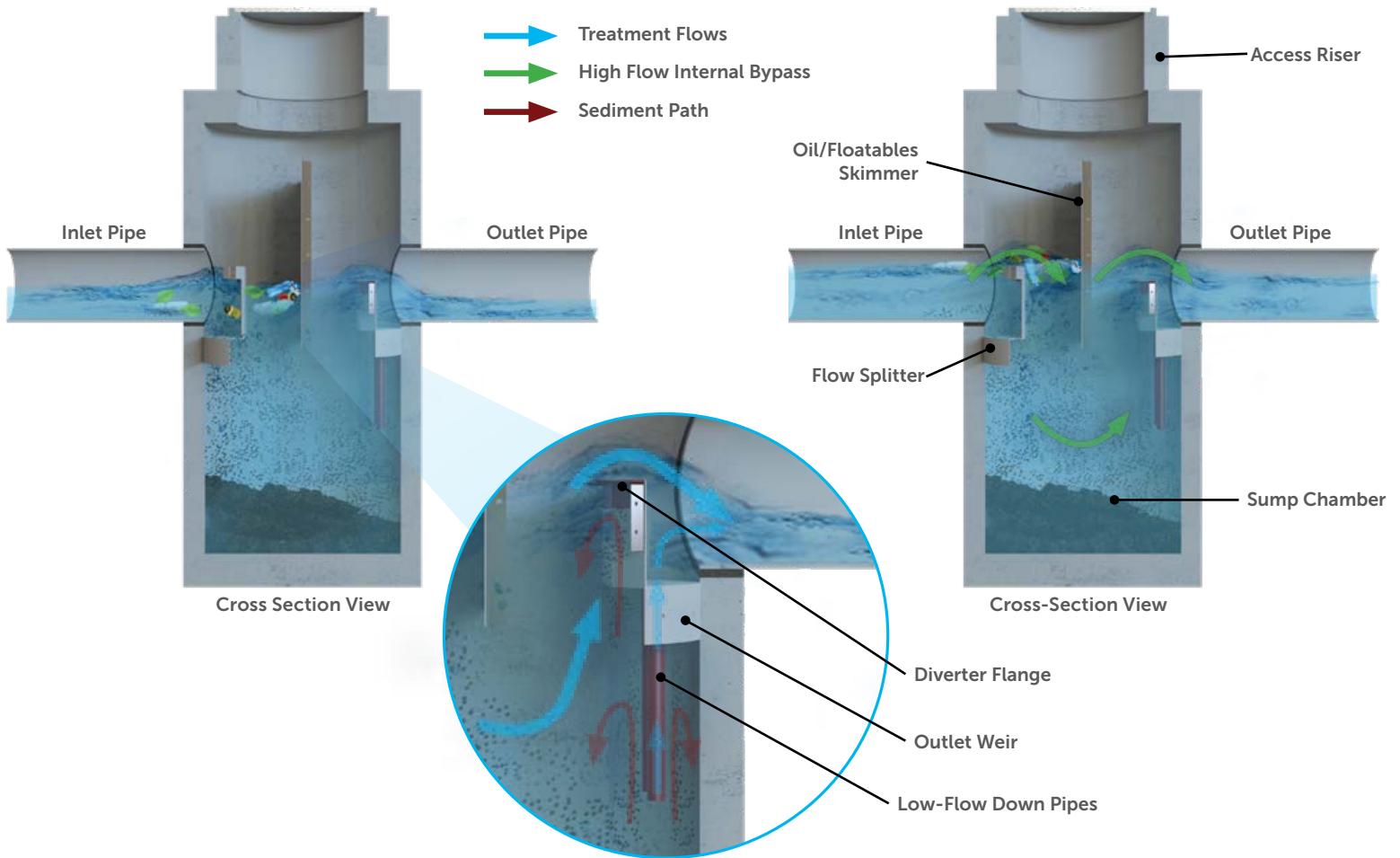
## Best-in-Class Load Rating – SciCloneX® Hydrodynamic Separator

*The SciCloneX Hydrodynamic Separator provides an industry leading hydraulic loading rate and improved performance while maintaining cost-effective design features.*

The SciCloneX ushers in a new era for hydrodynamic separators. The upgraded design has achieved an industry-leading hydraulic loading rate and improved performance in comparison to other NJDEP certified HDS devices, while maintaining the cost-effective design features customers require.

The SciCloneX is designed to capture and retain sediment, trash, and hydrocarbons, accepts inlet pipes from multiple angles, and comes equipped with an internal bypass. The SciCloneX is manufactured from high-density polyethylene components which are non-corrosive and extremely durable. This comprehensive system is the ultimate combination of reliability and cost-effective hydrodynamic separation.

# How the SciCloneX® Works

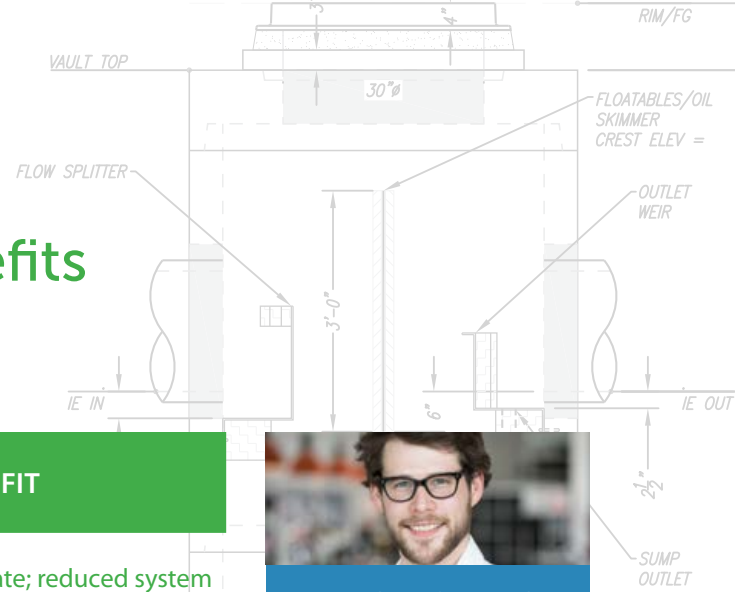


1. The SciCloneX Separator's inlet flow splitter redirects inlet flows away from the center of the chamber in two directions along the system's perimeter creating two swirling vortexes.
2. Free oils and other floatables are trapped by the baffle wall.
3. Fine sediment settles down to the bottom of the sump chamber, maximizing sediment collection.
4. As water passes under the oil/floatables skimmer, flows either travels upward to the crest of the outlet weir and diverter flange or through the low-flow down pipes. By distributing a portion of the flow away from the outlet weir, the velocity is reduced to enhance settling of finer sediment.

The SciCloneX provides an industry leading loading rate

# SciCloneX<sup>®</sup> Features and Benefits

FEATURE	BENEFIT
Unique inlet flow splitter and outlet weir	Best-in-class loading rate; reduced system size and costs
100% Non-corrosive components	Reliability and a long service life
Internal high-flow bypass	Eliminates the need for a separate bypass structure
Clear access to sump and stored pollutants	Fast, easy maintenance



## APPLICATION TIPS

- Look for systems that provide higher loading rates to reduce size and costs.
- Pretreating detention, infiltration, and green infrastructure practices with a hydrodynamic separator can protect downstream structures and provide for easy maintenance.

# SciCloneX<sup>®</sup> System Sizing

MODEL #	DIAMETER (FT)	TREATMENT FLOW RATE 50% TSS REMOVAL (CFS) <sup>1</sup>	TREATMENT FLOW RATE 80% TSS REMOVAL (CFS) <sup>2</sup>	SURFACE AREA (SF)
SCX-4	4	1.82	1.66	12.6
SCX-5	5	2.81	2.59	19.6
SCX-6	6	4.09	3.74	28.3
SCX-8	8	7.27	6.65	50.2
SCX-10	10	11.36	10.37	78.5

<sup>1</sup> Based on a verified surface area specific hydraulic loading rate of 64.9 gpm/ft<sup>2</sup> for test sediment with a median particle size of 75 μm and an annualized weighted TSS removal of at least 50% using the method specified in the NJDEP HDS Protocol.

<sup>2</sup> Based on a verified surface area specific hydraulic loading rate of 59.3 gpm/ft<sup>2</sup> for test sediment with a median particle size of 110 μm and an annualized weighted TSS removal of at least 80%. NJCAT verified.

Alternative sizing approaches are available to meet local jurisdictional requirements.

# SciCloneX<sup>®</sup> Applications

SciCloneX is commonly used in the following stormwater applications:

- Stormwater quality control – trash, debris, sediment, and hydrocarbon removal
- Urban retrofit and redevelopment
- Inlet and outlet protection
- Pretreatment for filtration, detention/infiltration, bioretention, rainwater harvesting systems, and Low Impact Development designs

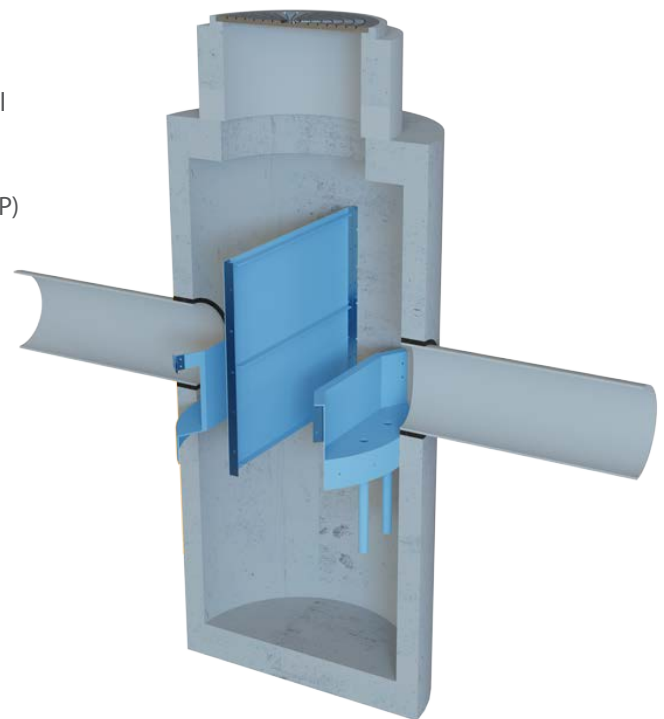


*SciCloneX offers highest NJDEP certified hydraulic loading rate at 64.9 gpm/ft<sup>2</sup>*

## Select SciCloneX<sup>®</sup> Approvals

SciCloneX is approved through numerous local, state and federal verification programs, including:

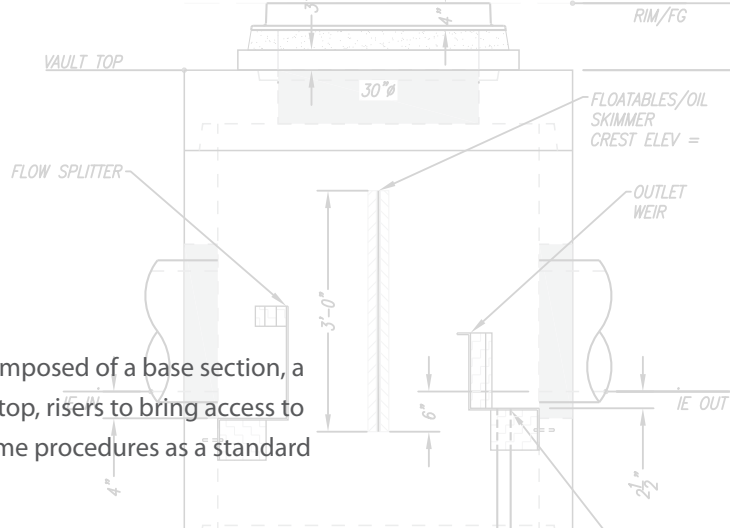
- New Jersey Department of Environmental Protection (NJDEP)
- New Jersey Department of Environmental Protection (NJDEP) Scour Testing
- New Jersey Corporation for Advanced Technology (NJCAT) Verification



**A breakthrough system for underground storage treatment**

# Select SciCloneX® Installation

Installation of the SciCloneX Separator is quick and easy. The system is composed of a base section, a middle riser with holes for pipe connections and internals preinstalled, a top, risers to bring access to finish surface, and access covers. Installation of the system follows the same procedures as a standard manhole installation.



Step 1: Install the base section.



Step 2: Lift and place middle riser.



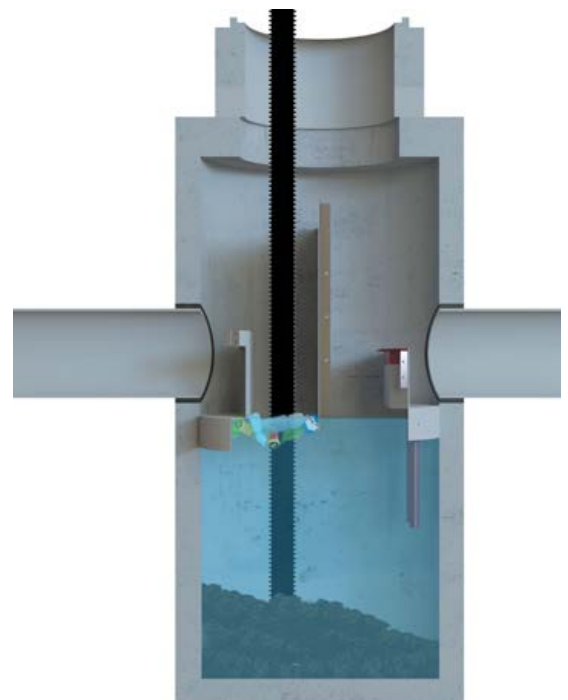
Step 3: Place top slab with access holes.

# SciCloneX® Maintenance

The entire sump is accessible and can be viewed from the finished surface, and is completely open from the top to bottom.

The system can be accessed from both sides of the baffle wall, providing unobstructed access to stored pollutants, making it easy to maintain using a vacuum truck, with no requirement to enter the unit.

Contech has a network of Certified Maintenance Providers to provide maintenance on SciCloneX and other stormwater BMP's.



The entire sump of the SciCloneX is accessible and can be viewed from the finish surface.

# A partner you can rely on



STORMWATER  
SOLUTIONS



PIPE  
SOLUTIONS



STRUCTURES  
SOLUTIONS

Few companies offer the wide range of high-quality stormwater resources you can find with us — state-of-the-art products, decades of expertise, and all the maintenance support you need to operate your system cost-effectively.

## THE CONTECH WAY

Contech® Engineered Solutions provides innovative, cost-effective site solutions to engineers, contractors, and developers on projects across North America. Our portfolio includes bridges, drainage, erosion control, retaining wall, sanitary sewer and stormwater management products.

## TAKE THE NEXT STEP

For more information: [www.ContechES.com](http://www.ContechES.com)

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