

# Jellyfish<sup>®</sup> Filter

## Stormwater Treatment



# 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**



## Setting new standards in Stormwater Treatment – Jellyfish® Filter

*The Jellyfish Filter has been tested in the field and laboratory, and has received approval from numerous stormwater regulatory agencies.*

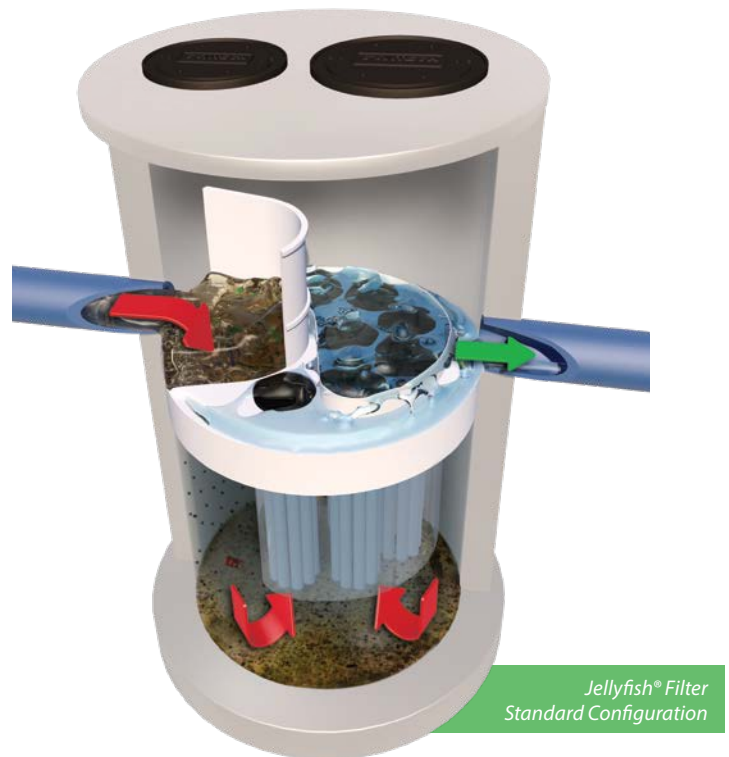
The Jellyfish Filter is a stormwater quality treatment technology featuring high flow pretreatment and membrane filtration in a compact stand-alone system. Jellyfish removes floatables, trash, oil, debris, TSS, fine silt-sized particles, and a high percentage of particulate-bound pollutants; including phosphorus, nitrogen, metals and hydrocarbons. The high surface area membrane cartridges, combined with up-flow hydraulics, frequent, passive backwashing, and rinseable/reusable cartridges ensure long-lasting performance.

*Jellyfish® Filter*

# How the Jellyfish® Filter Treats Stormwater

## Tested in the field and laboratory ...

- Stormwater enters the Jellyfish through the inlet pipe and traps floating pollutants behind the maintenance access wall and below the cartridge deck.
- Water is conveyed below the cartridge deck where a separation skirt around the cartridges isolates oil, trash and debris outside the filtration zone.
- Water is directed to the filtration zone and up through the top of the cartridge where it exits via the outlet pipe.
- The membrane filters provide a very large surface area to effectively remove fine sand and silt-sized particles, and a high percentage of particulate-bound pollutants such as nitrogen, phosphorus, metals, and hydrocarbons while ensuring long-lasting treatment.
- As influent flow subsides, the water in the backwash pool flows back into the lower chamber. This passive backwash extends cartridge life.
- The draindown cartridge(s) located outside the backwash pool enables water levels to balance.

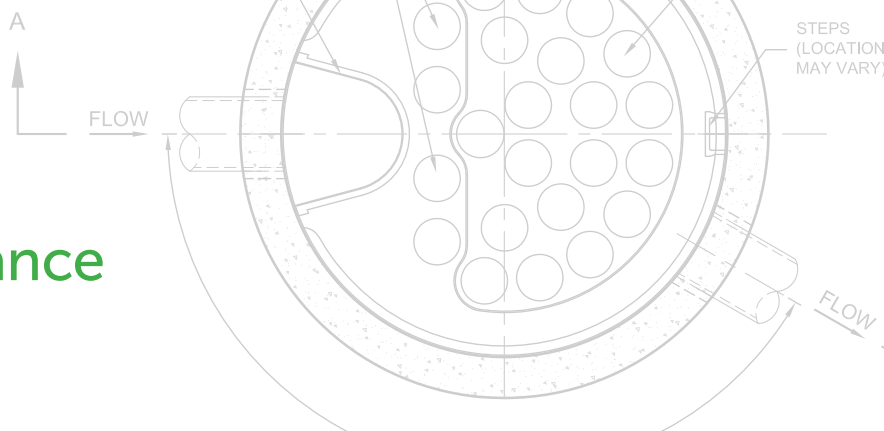


Learn More:  
[www.ContechES.com/jellyfish](http://www.ContechES.com/jellyfish)



Pretreat bioretention or infiltration with Jellyfish to extend service life.

# Jellyfish® Filter Performance Testing Results



## APPLICATION TIPS

- The Peak Diversion Jellyfish provides treatment and high-flow bypass in one structure, eliminating the need for a separate bypass structure.
- LID and GI are complemented by filtration solutions, as they help keep sites free from fine sediments that can impede performance, remove unsightly trash, and provide a single point of maintenance.
- Selecting a filter with a long maintenance cycle and low maintenance cost will result in healthy waterways and happy property owners.



*The pleated tentacles of the Jellyfish® Filter provide a large surface area for pollutant removal.*

| POLLUTANT OF CONCERN         | % REMOVAL |
|------------------------------|-----------|
| Total Trash                  | 99%       |
| Total Suspended Solids (TSS) | 89%       |
| Total Phosphorus (TP)        | 59%       |
| Total Nitrogen (TN)          | 51%       |
| Total Copper (TCu)           | > 50%     |
| Total Zinc (TZn)             | > 50%     |



Sources:

TARP II Field Study – 2012 JF 4-2-1 Configuration  
MRDC Floatables Testing – 2008 JF6-6-1 Configuration

# Jellyfish® Filter Features and Benefits

| FEATURE  | BENEFITS  |
|--|---|
| High surface area membrane filtration                                | Low flux rate promotes cake filtration and slows membrane occlusion |
| High design treatment flow rate per cartridge (up to 80 gpm (5 L/s)) | Compact system with a small footprint, lower construction cost      |
| Low driving head (typically 18 inches or less (457 mm))              | Design flexibility, lower construction cost                         |
| Lightweight cartridges with passive backwash                         | Easy maintenance and low life-cycle cost                            |

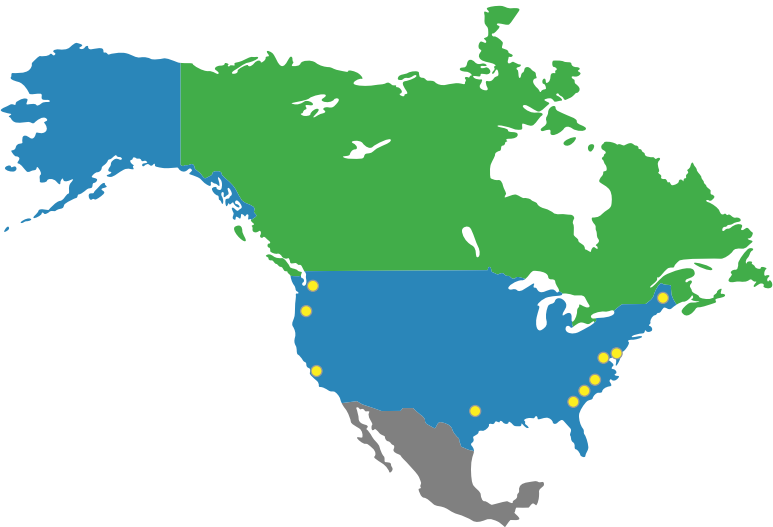


The Jellyfish Filter can be configured in a manhole, catch basin, or vault.

## Select Jellyfish® Filter Certifications and Verifications

The Jellyfish Filter has been reviewed by numerous state and federal programs, including:

- New Jersey Corporation for Advanced Technology (NJCAT) – Field Performance per TARP Tier II Protocol
- Washington State Department of Ecology (TAPE – CULD)
- Maryland Department of the Environment (MD DOE)
- Canada ISO 14034 Environmental Management - Environmental Technology Verification (ETV)
- Texas Commission on Environmental Quality (TCEQ)
- Virginia Department of Environmental Quality (VA DEQ)

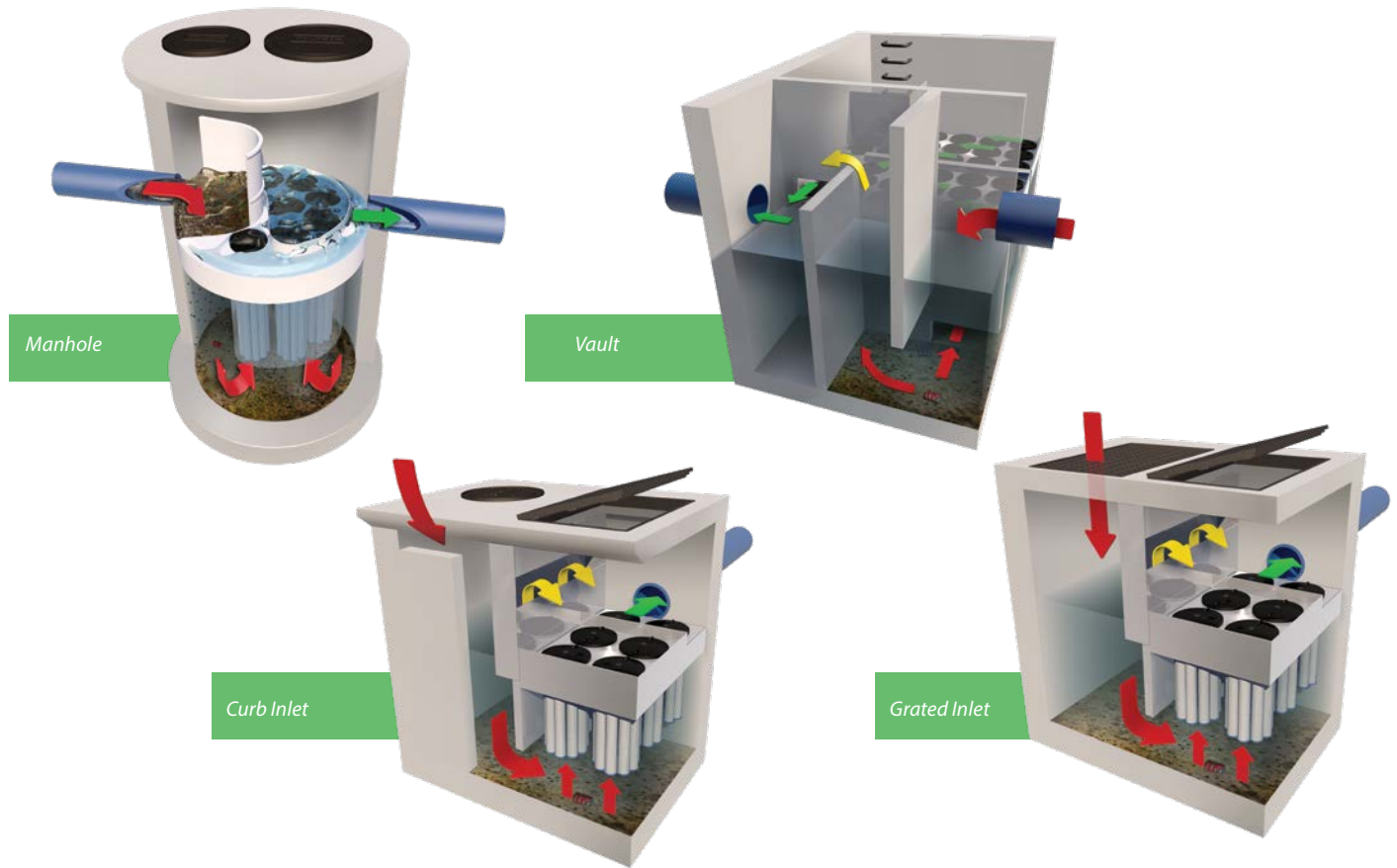


Field tested and performance verified

# Jellyfish® Filter Configurations

## Multiple system configurations to optimize your site ....

The Jellyfish Filter can be manufactured in a variety of configurations: manhole, catch basin, vault, fiberglass tank, or custom configurations. Typically, 18 inches (457 mm) of driving head is designed into the system. For low drop sites, the designed driving head can be less.



## Jellyfish® Filter Maintenance

- Jellyfish Filter cartridges are light weight and reusable
- Maintenance of the filter cartridges is performed by removing, rinsing and reusing the cartridge tentacles.
- Vacuum extraction of captured pollutants in the sump is recommended at the same time.
- Full cartridge replacement intervals differ by site due to varying pollutant loading and type, and maintenance frequency. Replacement is anticipated every 2-5 years.
- Contech® has created a network of Certified Maintenance Providers to provide maintenance on stormwater BMP's.



*The Jellyfish® Filter tentacle is light and easy to clean.*

# 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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