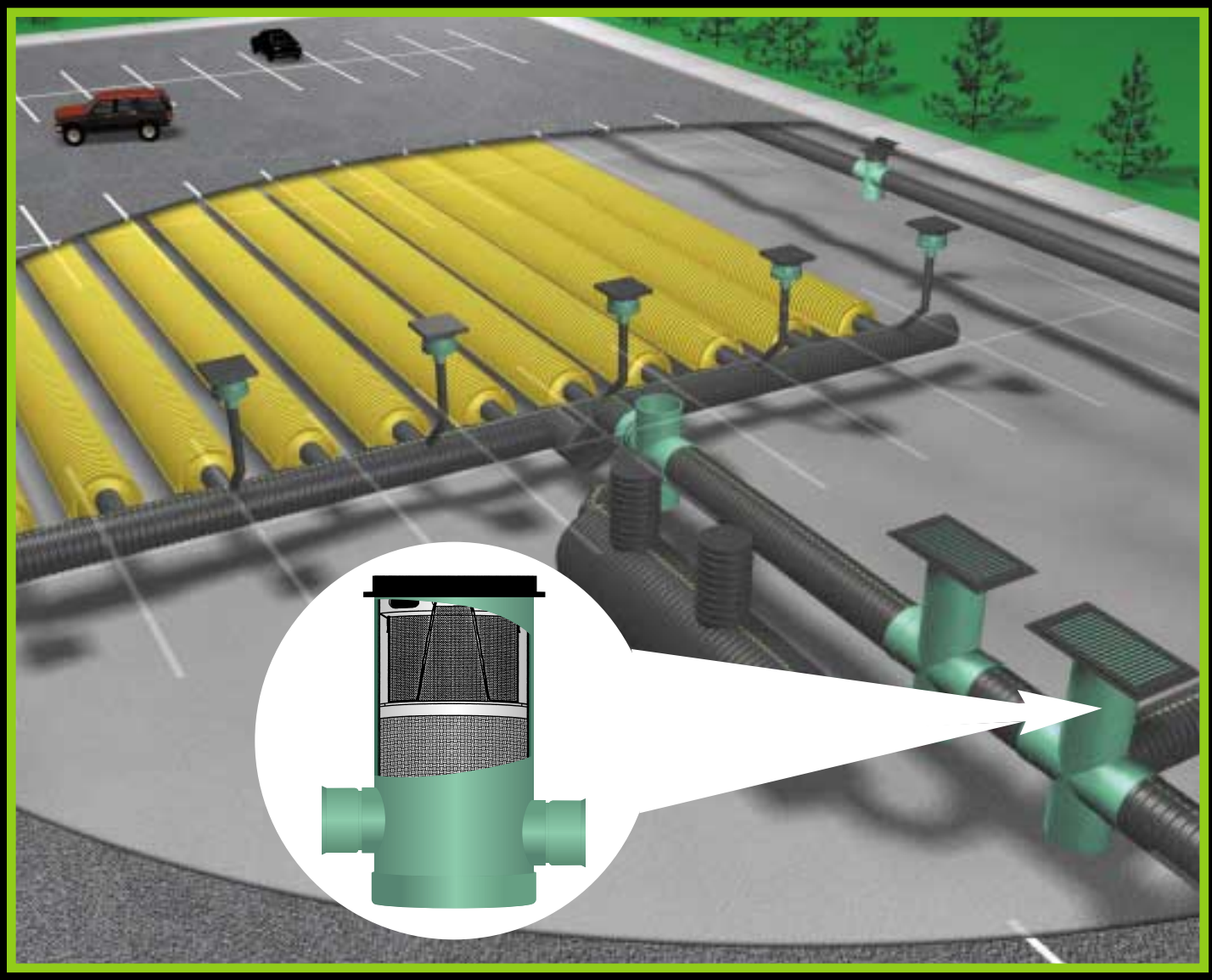
StormPURE™

Catch Basin Insert



Exceptional hydrocarbon removal at the head of the storm water treatment train

ADS®

Treating storm water at the source

Phase II of EPA's National Pollution Discharge Elimination System requires all but the smallest municipal and industrial storm sewer systems to treat storm water discharge to the "maximum extent practicable." The regulations are not clear on the allowable concentration of specific pollutants, but it is generally agreed that significant removal of suspended solids, hydrocarbons, sediment, metals and nutrients is required.

The EPA lists a variety of best management practices (BMPs) for treating storm water, and local jurisdictions are free to choose the ones they believe will provide the most effective and economical compliance. One important factor is the ease with which the BMP can be adapted to the existing storm sewer system.

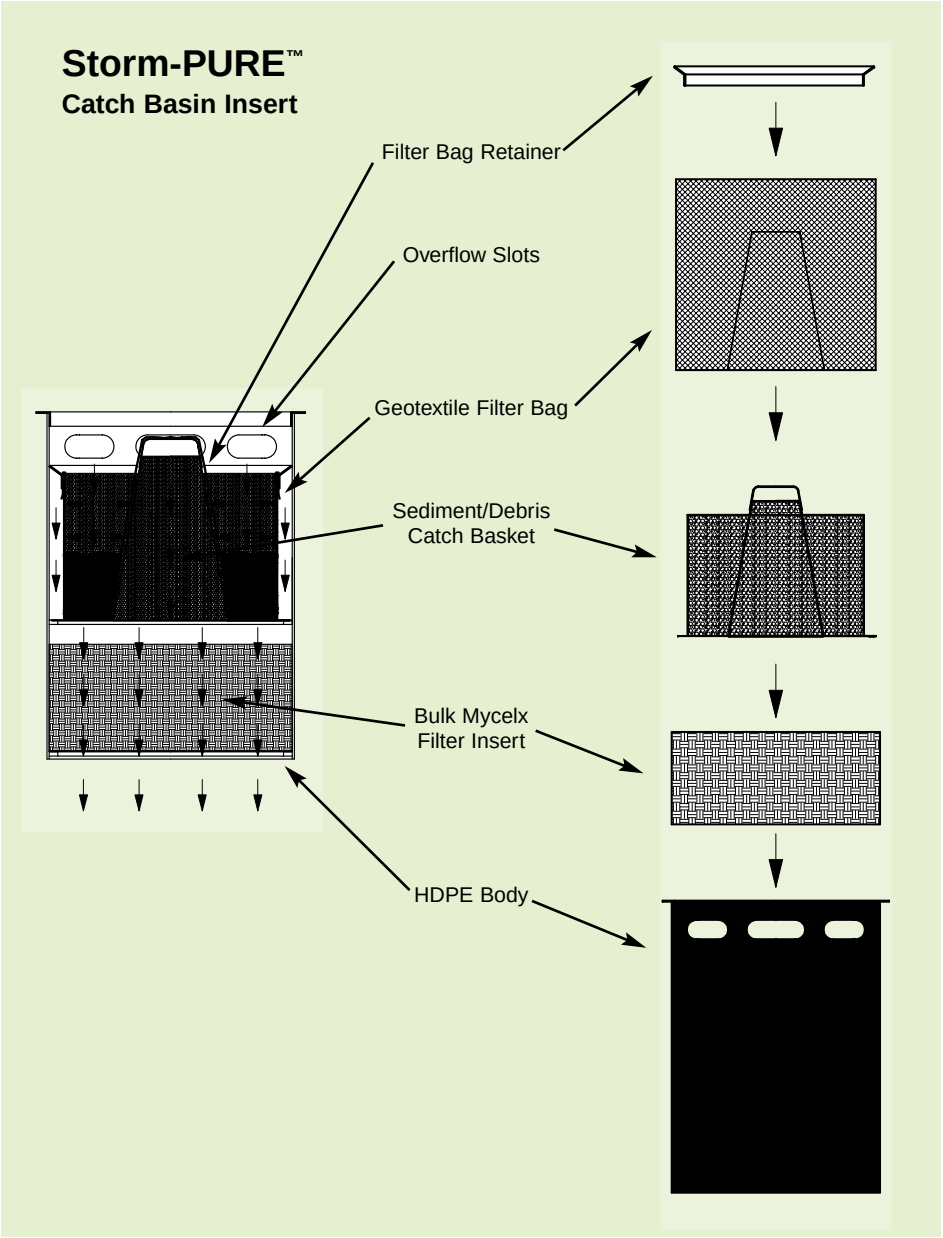
Catch Basin Inserts

Storm water treatment is especially important in locations with higher pollutant concentrations, such as roadways, parking lots, and maintenance and loading areas. Catch basin inserts are increasingly being selected for these applications because of their adaptability to existing drainage systems, fast installation, high flow volume, relatively low cost, and pollutant removal performance.

Storm-PURE™

The Nyloplast Division of Advanced Drainage Systems has developed a catch basin insert that provides all of the above benefits, and is particularly efficient at removing pollutants. The Storm-PURE catch basin insert is a two-stage unit that will fit into 24" nominal diameter catch basins (additional sizes to be developed as demand dictates).

The upper section consists of a perforated metal catch basket covered by a geotextile filter bag. This assembly captures sediment and debris while allowing filtered water to pass freely down through the center cone.



The lower stage contains a patented Mycelx® filter insert that attracts and holds tiny particles of hydrocarbons and oil-bound pollutants. The specially treated adsorbent material instantly bonds contaminant particles, resulting in a 95.0% removal rate of total petroleum hydrocarbons.

Both stages are housed in a corrosion-resistant high density polyethylene body with overflow slots at the top to act as a bypass in unusually high flow conditions. The complete assembly will pass 230 gpm without bypassing the flow.

The Storm-PURE catch basin insert fits readily into standard 24" Nyloplast catch basins (including curb inlets and road and highway basins), providing a highly engineered solution for treating storm water. A kit is available for retrofitting standard concrete basins.

Unmatched pollutant removal

The Storm-PURE water quality basin stands apart from competitive units in its ability to remove suspended solids, hydrocarbons and other pollutants. In a laboratory test, polluted storm water was processed through the unit, and samples of the influent and effluent were analyzed by Energy Laboratories Inc. to determine removal efficiency.

The results are shown in the table below, which also includes the published analysis of similar tests conducted at the University of Arkansas on four competitive catch basin inserts. As can be seen, the Storm-Pure basin has **more than double the pollutant removal efficiency than any of the competing brands.**

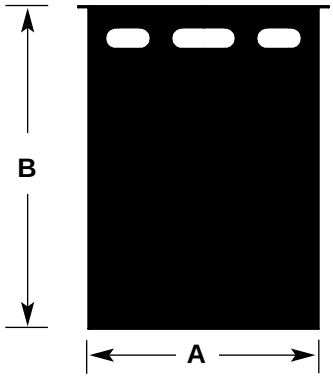
Pollution Removal Performance

Analyzed Components	Storm-PURE Basin Influent	Effluent	Removal Rate	Competitive Catch Basin Inserts Removal Rate A	B	C	D
Total Suspended Solids	295 mg/L	9 mg/L	**96.95%**	45%	10%	40%	21%
Total Petroleum Hydrocarbons	320 mg/L (at 150 gpm flow rate)	16 mg/L	**95.00%**	16%	18%	18%	16%
Zinc	0.45 mg/L	0.06 mg/L	**86.67%**	NA	NA	NA	NA
Oxygen Demand, Biochemical (BOD)	250 mg/L	26 mg/L	**89.60%**	NA	NA	NA	NA
Oxygen Demand, Chemical (COD)	650 mg/L	130 mg/L	**80.00%**	NA	NA	NA	NA
Nitrogen, Total	54.4 mg/L	17.7 mg/L	**67.46%**	NA	NA	NA	NA
Phosphorus, Total as P	28.9 mg/L	7.39 mg/L	**74.43%**	NA	NA	NA	NA
Sediment and Debris	–	–	**98.00%**	NA	NA	NA	NA

Storm-Pure Specifications

Max. Flow Rate of Filter (at 0 ft. of head weir flow)	230 gpm	(0.51 cfs)
Max. Flow Rate of Bypass (at 0.5 ft. of head orifice flow)	1189 gpm	(2.65 cfs)
Max. Flow Rate of Filter & Bypass (at 0.5 ft. of head orifice flow)	1419 gpm	(3.16 cfs)
Primary Filter (Upper Section) Sediment/Debris Storage Capacity	1.42 cu ft	(170 lbs)
Sediment/Debris Particle Size Captured by Primary Filter	>0.033 in	(838 micron)
Sediment/Debris Particle Size Captured by Secondary (Micelx) Filter	>0.012 in	(300 micron)
Secondary Filter Hydrocarbon Removal Storage Capacity	15 lbs	(2.04 gal)
Secondary Filter Media Volume	1.60 cu ft	–

Dimensions *



Nom. Diameter	A	B
24”	21.38”	30.00”

* Additional sizes to be developed as dictated by demand.

Recommended Maintenance Schedule and Procedure

(Personnel should wear protective gear on hands and proper eye protection.)

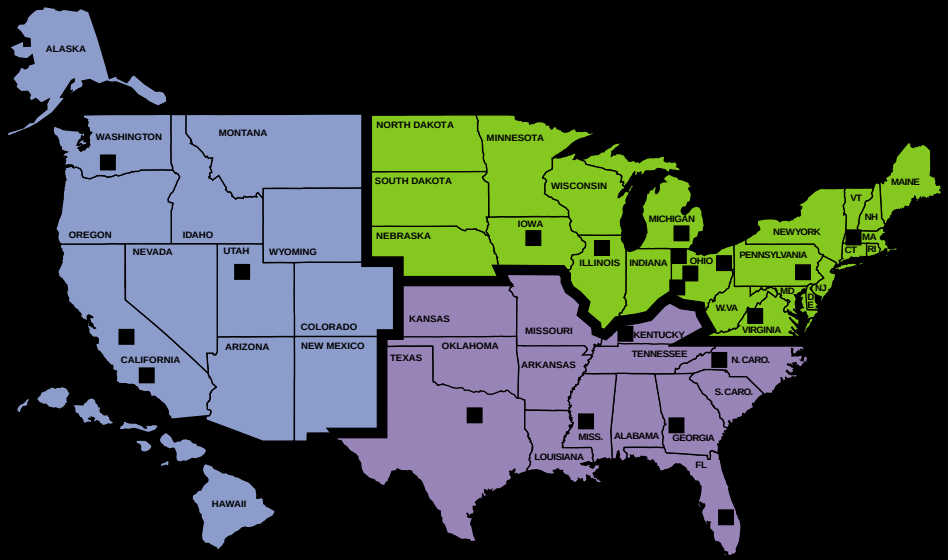
Monthly, or following 6" of accumulated rainfall:

1. Remove grate.
2. Lift out the catch basket (upper chamber) by hand or mechanical lifting device.
3. Remove the gasket material and lift out the geotextile filter bag from the basket.
4. Dispose of sediment and debris. If sediment has dried or caked, it may be necessary to wash the bag.
5. Inspect the filter bag. If too much sediment has dried and cannot be washed out, or if any tears or holes are discovered, the bag should be replaced.
6. Re-position the bag in the catch basket and re--install the basket into the top of the Storm-Pure unit.
7. Replace the grate.

Every 6 months, or after oil/fuel or other hazmat spill event:

1. Clean and inspect the filter bag as outlined at left.
2. The Mycelx hydrocarbon adsorption bag is located in the lower chamber of the Storm-Pure assembly.
3. Obtain a replacement Mycelx filter by calling 800-821-6710.
4. Prior to removing filter, consult with local waste management authorities to determine proper disposal procedure.
5. Remove Mycelx filter bag and dispose of in accordance with local requirements.
6. Install a fresh Mycelx filter into the lower chamber, making sure it is lying flat and is equally displaced.
7. Re-assemble the unit and replace the grate.

ADS Sales and Service Locations



Zone Offices

- **MIDWEST/NORTHEAST**
  LONDON, OH
  1-800-733-9554
- **SOUTHERN**
  FRANKLIN, TN
  1-800-733-9987
- **WESTERN**
  WASHOUGAL, WA
  1-800-733-8523
- **MANUFACTURING FACILITY LOCATIONS**

To learn more about the Storm-Pure Catch Basin Insert and the full line of ADS water quality and drainage products, call 1-800-821-6710.

THE MOST ADVANCED NAME IN DRAINAGE SYSTEMS®

ADVANCED DRAINAGE SYSTEMS, INC.
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800-821-6710 www.ads-pipe.com

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