MultiDrain Systems, Inc.

Manufacturers of Pre-engineered Trench Drain Systems



Surface Drainage Technology & Solutions

EconoDrain[®] ● EconoDrain PT-2[™] ● EconoDrain DG-4[™] ● Alfa Channel[®] ● Alfa Slot[®] ● MultiDrain[®]





MultiDrain Products

EconoDrain[®] ● EconoDrain PT-2[™] ● EconoDrain DG-4[™] ● Alfa Channel[®] ● Alfa Slot[®] ● MultiDrain[®]

	Product Name & Description	Typical Applications	Product Information
	EconoDrain® Pre-engineered Trench Drain Forming System (Removable Forms)	Loading docks Food & beverage Petrochemical Automobile dealerships Fire stations Numerous civil uses Commercial & Industrial	96" Long form sections 4.5" - 24" Trench Widths 0.5% Standard Slope Radius or Square Bottoms Monolithic Concrete Run Lengths 264' to 336' (Std.) Easily Customized
	EconoDrain PT-2 [®] 2 - Point Bolt Down Grate System Extra Heavy Duty Pre-engineered Trench Drain Forming System (Removable Forms)	Airports Ports Intermodal DOT Heavy Industrial Military Petrochemical	96" Long Form Sections 8" & 12" Trench Widths 0.5% Standard Slope Extra Heavy Duty System Load Rating: HS25/FAA Bolt Down Grates Made in America
	EconoDrain DG-4™ Decorative Grate Series and Econo- Drain Pre-engineered Trench Drain Forming System (Removable Forms)	Driveways Parks Plaza Decks Patios Fountains Entryways Landscape & Hardscape	78-3/8" Long Form Sections 4" Interior Trench Width 24 Decorative Grate Options Ductile Iron & Stamped Grates Run Length 336' (Std.) Fast and Easy to Install Made in America
	MultiDrain [®] Steel Trench Drain System	Food & Beverage Food Service Medical Fire Stations Automobile Dealerships Petrochemical Facilities Commercial & Industrial	96" Long Sections 6", 8", 10", 12", 15" 18" & 24" Pre-sloped up to 1% Heavy Duty System Stainless & Galvanized Steel 12, 14, 16 or 18 Gauge Steel EZ Rebar Anchor Stand
A State of the second	Alfa Channel [®] Modular, Precast, Polymer Concrete Trench Drain System.	Loading Docks Food & Beverage Petrochemical DOT Civil Military Industrial	39" Long Sections 4" Interior Trench Width Pre-sloped 0.6% Polyester (Std) / Vinylester Radius Bottom Tongue & Groove Joints UL Certified
	Alfa Slot [®] PVC Pipe and Polymer Concrete Light Duty Trench Drain System	Swimming Pools Plaza Decks Side Walks Patio Pavilions Shower Stalls Water Features	39" & 78" Sections 4" & 6" PVC Pipe Sizes Schedule 40 PVC 1/4" & 1/2" Slots Light Duty ADA Compliant Connector Saddles & End Caps

Refer to www.multidrainsystems.com for additional information and available components.

EconoDrain Trench Drain Forming System

EconoDrain[®] is a pre-engineered trench forming system made from expanded polystyrene (EPS) foam forming sections and steel frames for strength and supporting the various types of grates. Concrete is poured around the EPS foam and frame, forming the engineered trench. The EPS foam forms are then removed leaving the desired trench width, depth and slope. Grates are then placed in the frame rail and locked in place with a center toggle locking device assembly. Two point bolt down system is available, see Series PT-2. Custom slopes, depths, lengths and square bottoms are also available.

EconoDrain form sections are 8' long, widths range from 4.5" up to 24", and depths from 4.25" up to 28.5". Standard run lengths range from 264' to 336' (See Run Slope of Slope ft. on Page 12).

EconoDrain standard sections, including the EPS foam and steel frames are light weight and easy to handle. The smaller Series #4 (4.5" wide) weighs approximately 32 lbs. and the very large Series #24 (24" wide) is 88 lbs.

EconoDrain is specified for many site drainage and containment applications for warehouses, loading docks, airports, ports, firehouses, car wash bays, automobile dealership garages and may other uses.



Applying form release to foam forms



Placing concrete & vibrating



Installing EconoDrain 8' long sections



EPS foam forms removed



ECONOMICAL

- Fast and easy to install
- Monolithic concrete
- No external form lumber
- No special installation chairs
- Only three basic components
- Easy to field miter sections
- Easy to use Intersection Kits
- Easily customized

- FAST & ACCURATE
- 8' Long forming sections
- Patented leveling system
- Engineered frame assembly
- Pre-sloped EPS foam forms
- Interlocking channels & frames
- No restriction on drain outlets
- Installs in one pour
- Easy removal of forms



Frames secured with alignment clips



Completed trench drain and grate

EconoDrain Steel Frame Options





FACTORY WELDED FRAME SPACER & FRAME ASSEMBLY



- 8 Feet long frame sections
- Factory welded frame spacers
- Accurate spacing & alignment
- Straight runs
- Fast and easy to install
- Form removal, field cut spacers
- Easy foam form removal



FIELD ASSEMBLED BOLT-IN-PLACE RAIL SPACER



- 8 Feet frame sections
- Field assemble
- Only three spacers
- Accurate spacing
- Accurate alignment
- Straight runs
- Simple spacer removal
- Easy form removal

WELDED ROD FRAME SPACER ASSEMBLY & BOLT-IN-PLACE REUSABLE RAIL SPACER

EconoDrain Series	#4	#6	#8	#10	#12	#15	#18	#24	#8 PT-2	#12 PT-2
Welded Rod Frame Spacer	Only Option	Standard	Standard	Not Available	Standard	Not Available	Not Available	Not Available	Not Available	Not Available
Bolt-in-Place Rail Spacer Bar	Not Available	Option	Option	Only Option	Option	Only Option	Only Option	Only Option	Only Option	Only Option
FRAME RAIL OPTIONS										
Black, Polyester Powder Coating	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Galvanized - Hot Dipped	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option
Stainless Steel	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option

EconoDrain Outlet Details

PIPE OUTLET DETAILS



Side Outlet



EconoDrain

End Outlet





INLINE CATCH BASIN

Side, end or bottom outlets

- Simply snug the pipe to the foam form
- No special fittings required •
- No expensive fittings
- No expensive fabrications required
- No factory fabrications required
- Can evacuate water at any location

Piping and code required fittings are supplied by others.



Steel Frame Options

- Carbon steel black polyester powder coating (Std.)
- Carbon steel hot dipped galvanized
- Stainless steel

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EconoDrain Intersections & Deep Forms



Miters

Contractors can easily field cut and miter EconoDrain to fit any angle. Other types of products may require factory fabricated miters costing hundreds of dollars per cut. Should factory miters get damaged, this could delay the project completion and be very costly.

Intersections and Corners

EPS Tee and Ell intersections are inexpensive foam parts manufactured to fit any size EconoDrain section. These foam intersections form a snug fit between two intersecting trenches resulting in a smooth transition.





STEP 4: Apply Adhesive to Mating Surfaces.

INSTALLING ECONODRAIN FORM IN DEEPER PORTION OF SYSTEM

Holes are provided through the center of the deeper EPS Forms for insertion of rebar. These holes maintain vertical alignment during initial concrete placement.

The rebar is driven only a few inches into the ground or sub-base.

Concrete must be filled on both sides of the form as evenly as possible. Multiple passes on either side are preferable while avoiding filling the trench from one side.

The rebar **MUST** be removed once the concrete/form pressure equalizes but prior to the concrete setting up.







EconoDrain & MultiDrain Grates





А	#4	EG-0424-1-DI-A	Ductile Iron	5-1/4" x 24"	3/4" x 4-1/2"	51.9%	HS25
В	#4	EG-0424-1-DI-ADA	Ductile Iron - ADA Compliant	5-1/4" x 24"	7/16" x 2-1/16"	30.4%	HS25
С	#4	EG-0424-1-DI-B	Ductile Iron	5-1/4" x 24"	1-1/2" x 4-1/2"	64.1%	HS25
D	#4	EG-0424-1-CI-B2	Cast Iron	5-1/4" x 24"	1-3/16" x 4-3/8"	55.2%	H20
Е	#4	* EG-0448-P	Stamped Perforated-ADA Compliant	5-1/4" x 48"	1/4" Round	8.5%	Pedestrian or H20
F	#4	* EG-0448-B	Stamped Slotted	5-1/4" x 48"	5/16" x 3-3/16"	17%	Pedestrian or H20
G	#6	EG-0824-1-DI-A	Ductile Iron	8" x 24"	1-3/8" x 3-7/16"	63.5%	HS25
Н	#6	EG-0824-1-DI-ADA	Ductile Iron - ADA Compliant	8" x 24"	7/16" x 2"	38.1%	HS25
Ι	#8	EG-1024-1-DI-A2	Ductile Iron	10" x 24"	1-5/16" x 4-7/16"	66.3%	HS25
J	#8	EG-1016-1-DI-ADA	Ductile Iron - ADA Compliant	10" x 16"	7/16" x 2-1/4"	48%	HS25
				_			

* Available in Galvanized and Stainless Steel, Unreinforced and Reinforced.

EconoDrain & MultiDrain Grates



	_	_	_						_
101	100	101	10		100	100	100	100	101
E	10	10					100	10	
H	ж	10	10	10	10	10	10	10	10
H	10	10	E	10	10	10	14	10	11
100	H.	14	100	10	10	100	E.	10	10
FC	14	10	14	14	14	14	14	14	10
14	34	34	34	10	14	14	14	14	111
12	л	10	Jet	10	10	Jet .	100	10	JEL
	H.	×.	-			-	-	-	1



Grates are not to scale.

Fiberglass and Bar Grates are available, consult your MultiDrain Specialist.



Fibergia	ass anu i	Bai Grates are available, C	onsult your multiprain Specialist.				
Grate ID	Series	Part Number	Material Type	Size	Grate Slot Size	Open Area	Load Rating
K	#10	EG-1224-1-DI-A	Ductile Iron	12" x 24"	1-5/16" x 5-7/16"	64.8%	HS25
L	#12	EG-1424-1-DI-A2P	Ductile Iron	14" x 24"	1-3/16" x 6-3/8"	67%	H20
М	#12	EG-1424-1-DI-ADA	Ductile Iron - ADA Compliant	14" x 24"	3/8" x 1-13/16"	33.1%	HS25
Ν	#15	EG-1724-CI-A	Cast Iron	17" x 24"	1" X 6-5/8" Avg.	35.8%	H20
0	#18	EG-2024-DI-A	Cast Iron	20" x 24"	1" x 8-1/8" Avg.	37%	H20
Р	#24	MG-2624-CI-A	Cast Iron	26" x 24"	1" x 7-1/4" Avg.	38%	H20

*All Grate Dimensions are Nominal

EconoDrain PT-2 Extra Heavy Duty

EconoDrain PT-2[®] **Extra Heavy Duty Trench Drain System** is a complete pre-engineered trench drain forming system combining the features and advantages of our heavy duty EconoDrain[®] series with added load-carrying capability necessary for airports, seaports and intermodal facilities.

The system includes EPS forms for both 8" and 12" trench widths plus an anchored grate frame and standard cast grates capable of FAA and extra heavy duty load capability. The grate frame and grate incorporate a 2-bolt lockdown design firmly securing the grate to the frame. The system is complemented by In-Line catch basin or 24" x 24" and 32" x 32" catch basin assembly. The PT-2 system, for all its added durability, loses none of the simplicity and economy of the original EconoDrain system, and it's designed to fulfill any and all industrial site drainage needs.



EPS forms with form release applied, laid out in numerical sequence and ready to be Installed.



EconoDrain system installed, aligned and leveled with #4 rebar inserted through anchor stands and driven into earth.

Grate Rail / Frame Assembly

Grate rails are assembled on the jobsite with Bolt-In-Place Spacer Bars. The left and right rail shall be affixed together to assure proper symmetry and planar accuracy.

Grate rails provides positive lock of grate to frame by two point bolt down. The grate lock features additional anchor for solid embedment in concrete. Eight anchor stands provided per 8' rail to aid installation assembly; allow simple grade adjustments and provide grate rail pull out resistance.

Bolt-In-Place technology allows for easy shipment, sturdy construction, design flexibility, re-usable spacer Bar and improved shipping scheduling.

The grate seat rail standard finish is Black, Polyester Powder Coating, with options for Hot Dipped Galvanized or Stainless Steel.



Place concrete per installation instructions and vibrate concrete on each side of EPS forms.



EPS forms are removed, the monolithic concrete trench is cleaned then install PT-2 grates with two point bolt down.



EconoDrain DG-4 Decorative Grate Series



EconoDrain® Trench Drain Forming System

EconoDrain DG-4[™] combines the accuracy, cost efficiency and simplicity of EconoDrain[®] trench drain forming system. Add the beauty of decorative grates and EconoDrain DG-4 becomes the system of choice for Architects, Landscape Architects, Designers and Property Owners.

EconoDrain DG-4 is a pre-engineered trench drain system made from expanded polystyrene (EPS) foam forming sections and steel frames for supporting the grates. Once these components are assembled and installed, concrete is poured around the EPS foam and frames forming the monolithic concrete trench. The EPS foam is then removed leaving the desired trench width, depth and slope. Grates are then placed in the frame and secured with a center toggle locking device.

Decorative Grates are made from ductile iron conforming to ASTM A-536 with a minimum 494 psi proof load per AASHTO M-306. These grates are made in the U.S.A., and conform to the FHWA's "Buy America" policy 23 CFR 635.410(b) and Federal Acquisitions Regulations (FAR) 52.225 "Buy American Act".

Grates are also available in stamped galvanized steel, stainless steel, brass and thermoplastic grates. See the MultiDrain website "www.multidrainsystems.com" for details and specifications.

The EconoDrain DG-4 system is a tough, durable and esthetically pleasing. It's rugged design allows a wide variety of applications including driveways, parks, plaza decks, patios, entry ways, and many other landscape and hardscape uses.

EconoDrain DG-4 Decorative Grate Series

Herringbone

River Wave

Fern

Stamped Perforated

Vinylester

Imperial Star

Incan Myth

Picasso

Maze

Rain Drops

Smooth Stones

Stamped Slotted

Thermoplastic

Vinylester

Stamped Perforated Brass

EconoDrain Trench Forming System Data

₩ ₩	ries #6	Series #8 °	Series #10	Series #12 1 2"	Series #15	Series #18 10"	Series #24 2 4	EconoDrain DG-4 Decorative Series	PT-2 #8 Airports / Ports DOT / Intermodal	PT-2 #12 Airports / Ports DOT / Intermodal
6" 8"	8″		10″	12″	15″	18″	24″	4"	%	12″
8' - 0" 8' - 0"	8′ - 0″		8' - 0"	8′ - 0″	8′ - 0″	8′ - 0″	8′ - 0″	6′ - 6.74″ (2 Meters)	8′ - 0″	8′ 0″
8" 10"	10″		12"	14"	17"	20"	26"	4.8″ Nom.	10″	14″
6" - 26" 6" - 26"	6" - 26"		8" - 26"	8″ - 26″	12" - 28.5"	12" - 28.5"	15″ - 28.5″	4.375" - 25.75"	6" - 26"	8″ - 26″
0.5% 0.5%	0.5%		0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
vvailable Available /	Available /	1	Available	Available	Available	Available	Available	Available	Available	Available
0 to 1,372 281 to 2,151 606	281 to 2,151 606	909	5 to 3,030	743 to 3,989	1,914 to 6,229	2,359 to 8,115	4,721 to 19,581	86 to 706	281 to 2,151	743 to 3,989
45 to 3.06 0.63 to 4.79 1.35	0.63 to 4.79 1.35	1.35	5 to 6.75	1.66 to 8.89	4.26 to 13.88	5.26 to 18.08	10.52 to 43.63	0.19 to 1.57	0.63 to 4.79	1.66 to 8.89
320' 320' :	320′		288′	288′	264′	264′	264′	336′	320′	288′
tandard Standard Star	Standard Star	Star	ıdard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
					Steel Frame					
tandard Standard Sta	Standard Sta	Sta	ndard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Option Option C	Option O	0	ption	Option	Option	Option	Option	Option	Option	Option
Option Option C	Option C	0	ption	Option	Option	Option	Option	Option	Option	Option
					Catch Basin					
vvailable Available A	Available A	4	Available	Available	Available	Available	Available	Available	Available	Available
vailable Available Av	Available Av	Av	ailable	Available	Available	Available	Available	Available	Available	Available

Alfa Channel Polymer Concrete System

Alfa Channel^{*} is a modular, pre-cast, pre-engineered polymer concrete (PC) trench drain system that has an interior channel width of 4". The system includes 30 pre-sloped channel sections of 1 meter nominal (994mm) each with built in slope of 0.6%. The Alfa Channel system also includes additional neutral or non-sloping channels that may be inserted in 4 locations for additional trench length.

The system is complemented by both in-line catch basin and modular catch basin assemblies. The modular design of the Alfa Channel system provides true on-site adaptability and cuts down overall project costs by reducing excess materials and labor.

Channels are manufactured from UL certified polymeric materials. Alfa Channel features a high precision tongue and groove joint for positive alignment and a superior configuration for sealant application.

Property	Test Method	Value
Minimum Compressive Strength	ASTM C579	117,2 MPa (17,000 psi)
Minimum Bending Strength	ASTM C580	27,6 MPa (4,000 psi)
Minimum Tensile Strength	ASTM C307	13,8 MPa (2,000 psi)
Maximum Moisture Absorption	ASTM A140	0.2% [PCC 5%]
Freeze Thaw Cycles (1,600 cycles)	ASTM C666	No Weight Loss
Fungi Growth Resistance	ASTM G21	Zero (0) Mold Growth
Flame Spread - UL / ULC	UL 723	Class A - Flame 5; Smoke 95
Chemical Resistance	ASTM C267	Pass - Automotive Fluids

Without Ductile Iron Frame

With Ductile Iron Frame

*Stamped Grates - Available in Galvanized and Stainless Steel Other Grates are available, see website.

Alfa Slot Polymer Concrete & PVC Pipe

Alfa Slot[®]

Alfa Slot is a light duty trench system manufactured from PVC pipe with chemically resistant polymer concrete slot drain. Alfa Slot is available in 1/4" and 1/2" slot openings. Polymer concrete saddles and PVC connectors are used for connection points. Channels are aligned with tongue-in-groove connections molded into each end.

Alfa Slot is an architecturally pleasing, low profile system that has superior flow compared to other competitors in its class. The larger pipe volume under the slot drain keeps debris that passes through its opening moving to the outlet. The large pipe also ensures plenty of flow.

Typical applications, swimming pool decks, shower stalls, sidewalks, pavilions, plazas, and other places where a nearly invisible drain is advantageous.

- Clean lines and unmatched appearance
- Minimizes exposed hard surfaces
- 1 & 2 Meter lengths
- 4" and 6" PVC with section connectors
- ADA compliant 1/4" & 1/2" slot
- Catch basins are available with system

Patios and Pools

Alfa Slot with its narrow profile is perfect for patios, pools and other pedestrian areas that require additional drainage. Alfa Slot polymer concrete top will withstand the harsh environments that often destroy plastic systems.

ADA Compliant

Alfa Slot has a polymer concrete top with a slot opening of 1/4" or 1/2" making it one of the few ADA compliant slot drains on the market. Also, optional Heel Proof stainless steel covers are available. Clean lines and unmatched finishing capabilities make Alfa Slot a smart and cost effective solution for a wide variety of drainage problems. Polymer concrete channels are manufactured with concrete anchors molded into each side of the channel. Anchors add to securing Alfa Slot into the slab. There are three anchors on each side of the center slot (per meter).

Alfa Slot End View

Polymer concrete end caps are manufactured to fit the PVC pipe and will interlock, align and secure Alfa Channel sections. End caps will also support the end of Alfa Slot run at the same elevation as the saddles. End caps seal the end of the PVC pipe keeping concrete from filling the open end.

Polymer concrete saddles are used for fast and easy installation while assisting in leveling the system. Saddles are used at each joint to align and join sections together. Saddles flare out at the bottom for anchoring into the concrete slab.

Alfa Slot End Cap

Alfa Slot Saddle Connectors

MultiDrain Steel Trench Drain System

MultiDrain[®] Steel Trench Drain

MultiDrain[®] is a pre-engineered steel liner trench drain system. The system consists of metal form liners, adjustable EZ Grate Frame, anchor stands, frame anchorage into the surrounding concrete and grates. MultiDrain is versatile with interior channel widths ranging from 5-13/16" and up to 23-13/16" (see the chart below). The system includes EZ Frame with an adjustable feature allowing each channel to be either neutral in slope or adjusting up to 1% slope.

For faster installation and labor savings, standard channel sections are manufactured 8 feet long and includes overlapping connectors which may be sealed using a flexible caulk or field welding. The modular design of the MultiDrain system provides true on-site adaptability and cuts down overall project costs by reducing excess materials and labor.

Steel Channel

MultiDrain's unique feature is the Steel Channel construction. Steel channels make a tough, durable and easy to install trench drain liner. The steel channel is fabricated in 16 gauge (standard) or 12, 14 and 18 gauges (options). The material options are galvanized steel, stainless steel (types 304 or 316) and duplex stainless steel.

EZ[®] Frame

The patented EZ grate frame is designed to allow the channels to be adjusted in the field for a slope up to 1%. Channels comes in the standard galvanized steel and optional stainless steel. Select the best frame material for your application or adhere to the professional engineer's specification. All frames are independently anchored into the surrounding concrete so that the encapsulation concrete receives the horizontal loads, not the channel walls.

Features and Benefits

- MultiDrain is a versatile pre-engineered steel trench drain system.
- The system options include metal liners in galvanized steel, stainless steel and duplex stainless steel.
- Steel channels are available in 16 gauge (standard) or 12, 14 and 18 gauge (options).
- Trench slopes from 0% to 1% are for optimal flow velocity.
- Custom made-to-order to fulfill specific site drainage project requirements.
- EZ-Frame incorporates affixed anchor stand for leveling and grade adjustments.
- EZ-Frame and spacer bars attach to metal channels using wingnuts and bolts.
- Anchor stands and anchor studs welded to the EZ-Frame assure secure anchorage into the surrounding concrete.
- Engineered to accept a variety of grating types and service loads.
- Joints may be sealed using a flexible caulk or by welding.

MultiDrain Series	Grate Width	Channel Width	Channel Depth (From Top of Grate)
600	8″	5-13/16"	6" min. / 24" max.
800	10"	7-13/16"	6" min. / 24" max.
1000	12"	9-13/16"	6" min. / 24" max.
1200	14"	11-13/16"	6" min. / 24" max.
1500	17"	14-13/16"	6" min. / 24" max.
1800	20"	17-13/16"	6" min. / 36" max.
2400	26″	23-13/16"	6" min. / 36" max.

Use Grate Options for EconoDrain Series #6, #8, #10, #12, #15, #18 and #24

MultiDrain Steel Trench Drain

EconoDrain Inline Debris & Filtration

EconoDrain[®] **Filtration** is a patented forming technology to create a highly durable concrete component. EconoDrain Filtration is an economic solution for inline debris trap and filtration. EconoDrain Filtration is a pre-engineered concrete forming system manufactured of removable Expanded Polystyrene (EPS) foam forms. The unit comes complete with stainless steel debris screen, stainless steel filter rack holders, filter racks, filtration media, solid covers, side rails and end rails.

EconoDrain[®] pre-engineered trench drain forming system or Alfa Channel[®] polymer concrete channels capture the surface water runoff then feeds into EconoDrain Filtration. As effluent enters either through an inlet pipe or EconoDrain, the first chamber captures solid debris. After passing through the sediment screen, effluent passes through two removable smart sponge filter panels before exiting. The pre-sloped bottom eliminates ponding, an excellent feature where vector control is an issue.

EconoDrain Filtration is fast and easy to install with minimal excavation required. When site space is restricted, EconoDrain Filtration technology is perfect for sites that lack the necessary area for retention ponds and larger structures.

EconoDrain Filtration is designed especially for sites under 100 acres where specific pollutants such as oils, greases and hydrocarbons must be captured without impeding bypass flow particularly during the first fifteen minutes of rainfall or first flush effect.

Storm Water Filtration Media

EconoDrain Filtration is the perfect solution when seeking a BMP that must handle sheet flow, control vectors, collect debris, treat bacteria and capture hydrocarbons all at the same site. This system utilizes a variety of filtration media and fabrics.

- Standard Filtration "Blankets"
- Antimicrobial Filtration Media
- Hydrocarbon Media
- Heavy Metals Removal Media (HMR)

Description	Dimensions (in) Width, Depth, Length	Debris Volume	Bypass Flow Area Debris Chamber (in-sq)	Bypass Flow Area Filter Chamber #1 (in-sq)	Bypass Flow Area Filter Chamber #2 (in-sq)
1640FF24-4 (4' Long)	24" x 48" x 48"	9.4	46.8	165.8	-NA-
1640FF24-6 (6' Long)	24" x 48" x 72"	15.5	46.8	146.6	-NA-
1640FF24-6H (6' Long)	24" x 30" x 72"	9.5	42.5	146.6	-NA-
1640FF24-8 (8' Long)	24" x 48" x 96"	19.2	44.6	129.6	163.6
1640FF24-8H (8' Long)	24" x 30" x 96"	11.85	42.5	142.4	153.0

Alfa Channel Inline Debris & Filtration

Alfa Chanel[®] Filtration

Alfa Channel[®] Polymer Concrete Channels **Alfa Channel[®] Filtration** patented Drop Inlet Filter for Catch Basins 610 and 611 manufactured from UL/ULC certified polymeric material. Alfa Channel Filtration comes complete with stainless steel funnel, filter box and filter media.

Alfa Channel Filtration is fast and easy to install with minimal excavation required. Alfa Channel polymer concrete channels captures water runoff and drains to Alfa Channel Filtration. When site space is restricted, Alfa Channel Filtration technology is perfect for sites that lack the necessary area for retention ponds and larger structures.

Alfa Channel Filtration is designed especially for sites under 100 acres where specific pollutants such as oils, greases and hydrocarbons must be captured without impeding bypass flow particularly during the first fifteen minutes of rainfall or first flush effect.

The 2600 series of filtration catch basins feature a two or three-part, stackable structure that is made of polymer concrete and comes with grated cover. It can be used in conjunction with the Alfa Channel trench drain or as stand-alone unit. The basket inserts that hold the replaceable filter have built-in overflow relief. Units are easy inspect and clean. Basket and filter modules can be retrofitted to existing Alfa Channel 600 catch basins.

Storm water Filtration Media

Alfa Channel Filtration is the perfect solution when seeking a BMP that must handle sheet flow, control vectors, collect debris, treat bacteria and capture hydrocarbons all at the same site. This system utilizes a variety of filtration media and fabrics.

- Standard Filtration "Blankets"
- Antimicrobial Filtration Media
- Hydrocarbon Media
- Heavy Metals Removal Media (HMR)

Description	Dimensions (in) Width, Depth, Length	Debris Volume (cu. ft.)	Bypass Flow Area (in-sq)
2610FF	20" x 13" x 32"	.16	52.2
2611FF	20" x 13" x 48"	.24	52.2

EconoDrain & Alfa Channel Inline Filtration

Custom Designed for Clean Water Act Compliance

Compliance with Phase Two of the Clean Water Act (CWA), specifically of the National Pollutant Discharge Elimination System (NPDES) permit program, demands the use of Best Management Practices (BMP).

Both the private and public sector are now compelled to treat storm water runoff from sites such as:

- Parking Lots
- Auto Sales & Repair
- Trucking Facilities
- Fire Stations
- Manufacturing Yards
- Waterfront Cargo Ports
- Container Terminals
- Commercial & Industrial

EconoDrain and Alfa Channel Filtration are the perfect solution when seeking a BMP that must handle sheet flow, control vectors, collect debris, and capture hydrocarbons all on the same site. Their range of size makes them perfect for sites with limited space for treatment structures. Our drive to develop innovative BMP technology to address CWA requirements is a logical extension of our efforts to create solutions for the storm water engineer. For more than 30 years MultiDrain Systems has brought new thinking to surface drainage design. Our family of MultiDrain products is a perfect example of our approach to problem solving.

Clearly, any given BMP cannot satisfy every application. These products address specific type applications, and effective BMP's can be developed using filtration treatment structures alone. However, when the units are combined with EconoDrain and Alfa Channel trench drain systems, the result is a truly comprehensive collection and treatment system.

Industrial Point Source where fuel and petroleum product residues are present, fire stations, automobile operations, transportation hubs, manufacturing facilities, seaports, container transfer terminals and anywhere sheet flow interception is highly critical.

Filtration Performance: The system includes minimum pollutant removal as listed below.

- Pollutant Removal = 97% Hydrocarbons, EPA test method 418 for high levels.
- Pollutant Removal = 95% Suspended solids, EPA test method 160.2.

Test Method	Parameter	Results Un-Filtered	Results Filtered	Detection Limit	Units
EPA 1664	Oil & Grease	>1000	6	5	ppm
EPA 160.2	Total Suspended Solids	230	10	5	ppm
NWTPDX	#2 Diesel Fuel	910	3.4	0.2	ppm
NWTPDX	Motor Oil	15000	3	0.4	ppm
EPA 6020	Chromium	0.013	0.0044	0.001	ppm
EPA 6010	Copper	0.077	ND	0.01	ppm
EPA 6010	Lead	0.011	ND	0.01	ppm
EPA 6010	Zinc	2.1	0.85	0.01	ppm

Oil & Water Separator

OIL & WATER SEPARATOR UNIT

- Fire Stations
 - Auto Repair
- Gasoline Stations
- Airports
- Chemical Facilities

Product Description

A pre-cut, expanded polystyrene (EPS) form is used to create the correctly shaped, cast-in-place concrete tank. Cutouts in the form locate inlet and outlet pipe positions and form a slot for the insertable overflow baffle.

The Oil & Water Separator form is positioned and restrained from floating by 1-3/4" x 1-3/4" x 3/16" structural steel angle frame with welded anchor studs and "no-float" leg brackets attached.

Oil & Water Separator

As environmental regulations become more stringent, separations have become a must in facilities where oil and grease are present in the drainage stream and pose a threat as a pollutant. This unique product provides static separation of solid debris, free oils or other non-soluble chemicals from drain water before discharge.

Unlike other separations, the Oil & Water Separator is a light-weight, easily installed forming system. Using patented, non-floating formwork, the Oil & Water Separator installs without the necessity of heavy equipment. It provides a cost-effective system of unequaled efficiency.

The natural force of gravity separates oil, water and solid particles in the waste stream. Free oil droplets, being lighter than water, rise to the surface of the filled tank while heavier solids settle to the bottom. A baffle is used to prevent the water stream from circumventing the system during heavy flow conditions. It also retains solids in the inlet chamber, away from the discharge opening. A pipe tee at the top of the stand pipe assembly serves as a vacuum break and as a means of examining the discharge stream. The basic system contains no moving parts. Periodic removal of captured oil and solids is the only maintenance required.

The frame rails and "no-float" legs are quickly fastened together with nuts and clips to form a lightweight, yet sturdy assembly. NanoTuff-S epoxy coated steel angle and frame option. Made in America.

Reinforced diamond plate steel covers are designed for pedestrian or H-20 heavy-duty loading applications. All covers include retainers for security and safety. The complete Oil Water Separator assembly includes all piping and fittings.

System Specifications

Part Number	Storage Capacity gal (ltr)	API Design Capacity gpm (Ipm)	Dimensions (W x D x L) in.	I/O Invert in. (mm)	Installation Wt. w/o Cover Ibs (kg)	Shipping Weight Ibs (kg)
S160	160 (600)	21 (79)	23 x 48 x 48	12 (305)	75 (34)	235 (107)
S240	240 (900)	31 (119)	23 x 48 x 72	12 (305)	115 (52)	310 (141)
\$320	320 (1200)	41 (158)	23 x 48 x 96	12 (305)	150 (68)	390 (177)

For specifications and details please visit the MultiDrain Systems, Inc. website: www.multidrainsystems.com

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