



A Division of RGF Environmental Group, Inc.

AFL INDUSTRIES

1101 West 13th Street

Riviera Beach, Florida 33404

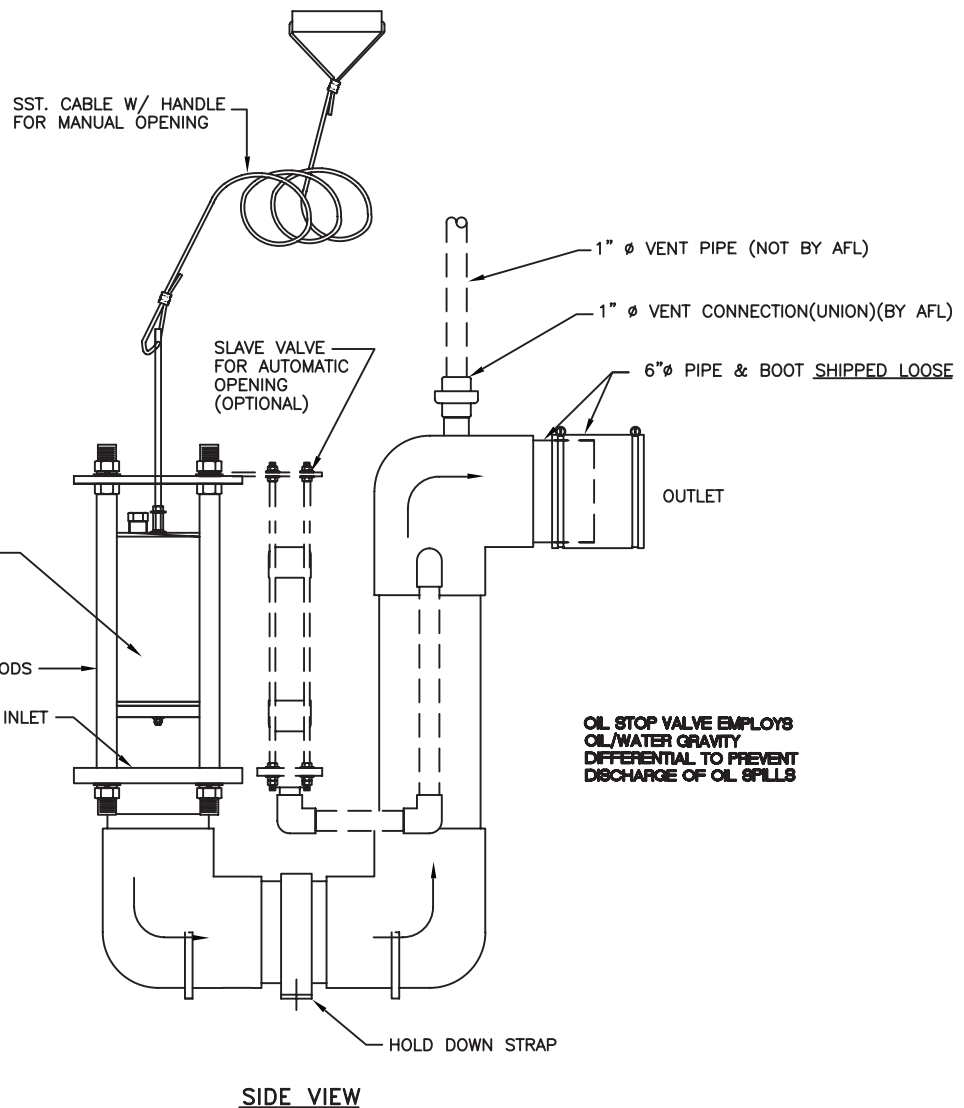
(561) 844-5200

PRODUCT BULLETIN NO. 8-05.B.1 A

**AFL
OIL STOP VALVE**
PVC MODELS
FLOW RATES 0-600 GPM

FUNCTION

PREVENTS DISCHARGE OF
SEPARATED OIL TO SEWERS/STREAMS



SIDE VIEW

FEATURES

Dependable Gravity Operation
Single Moving Part
Large Flow Capacity
Self-Opening (Slave Valve Option)
No Power Requirement
Corrosion Resistant Construction
Sizes: 4", 6" and 8"

Large, unpredictable oil spills can defeat the most conservatively designed pollution control system, but while the cost of such a system can be prohibitive, the consequences of not controlling a spill can be equally catastrophic. The AFL/Clark Oil Stop Valve (OSV) is designed to solve these problems.

ENGINEERING A BETTER ENVIRONMENT

Oil Stop Valves confine even large oil spills to the premises. The OSV is available from AFL prepackaged in a fiberglass catch basin or as an option on AFL oil/water separators. In addition, the OSV is available separately for installation in existing separators, catch basins or manholes.

The OSV has only one moving part, a ballasted float set at a specific gravity between that of oil and water. When an oil spill occurs, the float loses buoyancy as the oil level increases until it finally seats itself on the discharge port. Thus the oil spill is confined.

The Oil Stop Valve is fabricated from non-corrosive PVC and stainless steel. Standard sizes are 4", 6" and 8".

Consider the OSV for those application where oil spills are possible, but unpredictable such as electrical transformers, oil storage areas, and transportation fueling systems. The Oil Stop Valve is the most cost effective method to prevent a major disaster.

OSV Options

SLAVE VALVE - The slave is added to an Oil Stop Valve to allow the main float to reopen. Due to lack of water the main float will close. When additional rain water enters the sump, the slave valve float will open and allow water to enter the Oil Stop Valve Body. As the water level rises the main float will open due to water pressure pushing up against the bottom of the main float. In the event of an oil spill, the slave valve float and the main float will close containing the spill.

LEVEL SWITCH

FREEZE PROTECTION

HOW TO PICK THE PROPER VALVE TYPE & SIZE FOR YOUR APPLICATION

PVC

PVC models are the most economical way to prevent bulk hydrocarbon spills. Corrosion resistant PVC construction is an ideal choice for warm climates.

STAINLESS STEEL NOT EXTENDED

Stainless steel not extended models are used in lieu of PVC units in colder climates which may eliminate the necessity for an electric freeze protection package.

STAINLESS STEEL EXTENDED

Stainless steel extended model is our most popular valve if fire is possible. By extending the pipe thru the sump wall, there is no connection inside the sump to burn and fail.

VALVE SIZE

(MAX) FLOW RATE

4" DIAMETER	160 GPM
6" DIAMETER	360 GPM
8" DIAMETER	600 GPM

WARNING: EXCEEDING THESE FLOW RATES MAY CAUSE PREMATURE CLOSING.

AFL RECOMMENDS:

- Sanitary catch basin used to prevent premature valve closure due to leakage.
- 4' diameter catch basin for the OSV-4 and OSV-6, and a 5' diameter for the OSV-8.



A Division of RGF Environmental Group, Inc.

AFL INDUSTRIES

1101 West 13th Street

Riviera Beach, Florida 33404

(561) 844-5200

PRODUCT BULLETIN

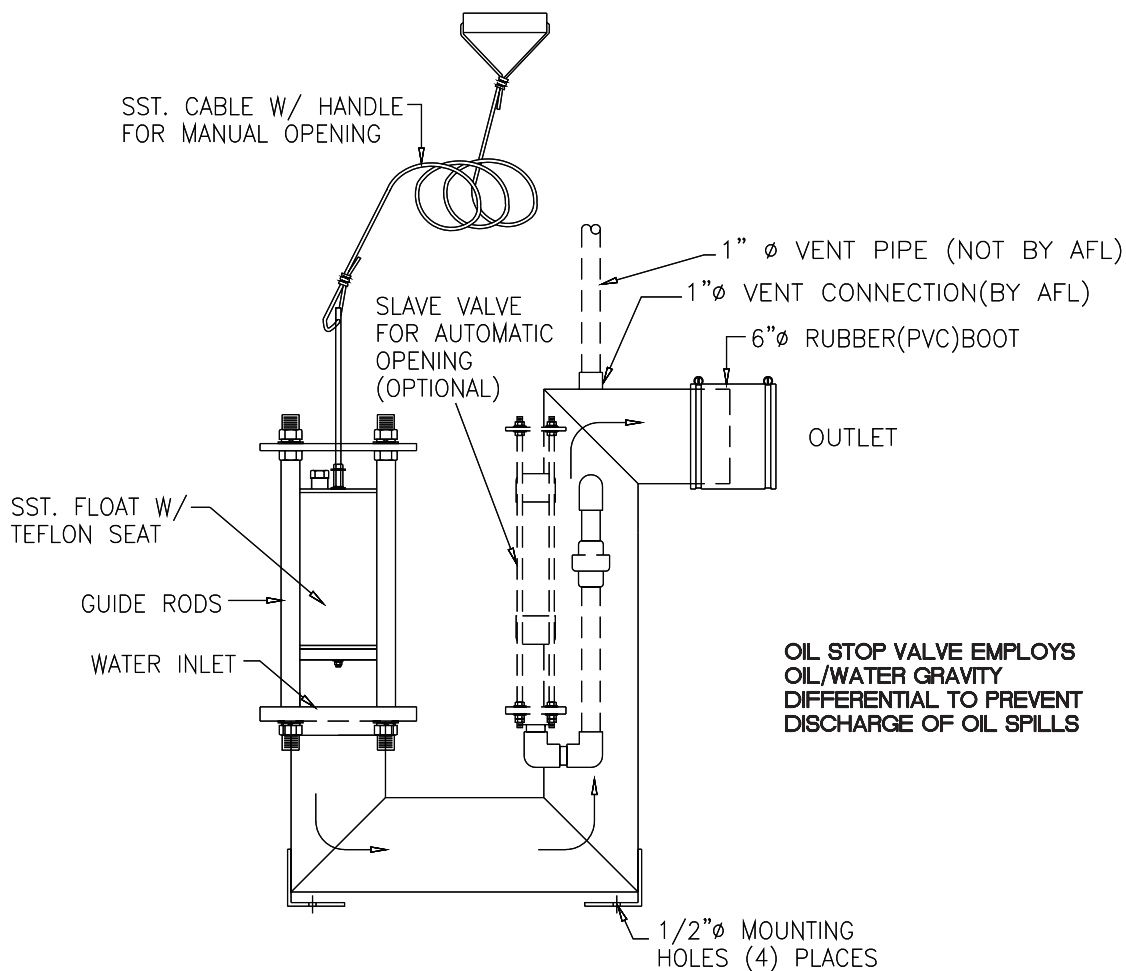
NO. 8-05.B.1 B

AFL OIL STOP VALVE

STAINLESS STEEL NOT EXTENDED MODELS
FLOW RATES 0-1400 GPM

FUNCTION

PREVENTS DISCHARGE OF
SEPARATED OIL TO SEWERS/STREAMS



SIDE VIEW

FEATURES

Dependable Gravity Operation
Single Moving Part
Large Flow Capacity
Self-Opening (Slave Valve Option)
No Power Requirement
Corrosion Resistant Construction
Sizes: 4", 6", 8", 10" and 12"

Large, unpredictable oil spills can defeat the most conservatively designed pollution control system, but while the cost of such a system can be prohibitive, the consequences of not controlling a spill can be equally catastrophic. The AFL/Clark Oil Stop Valve (OSV) is designed to solve these problems.

ENGINEERING A BETTER ENVIRONMENT



Oil Stop Valves confine even large oil spills to the premises. The OSV is available from AFL prepackaged in a fiberglass catch basin or as an option on AFL oil/water separators. In addition, the OSV is available separately for installation in existing separators, catch basins or manholes.

The OSV has only one moving part, a ballasted float set at a specific gravity between that of oil and water. When an oil spill occurs, the float loses buoyancy as the oil level increases until it finally seats itself on the discharge port. Thus the oil spill is confined.

The Oil Stop Valve is fabricated from non-corrosive stainless steel. Standard sizes are 4", 6", 8", 10" and 12". Larger piping systems can be accommodated by manifolding units together.

Consider the OSV for those application where oil spills are possible, but unpredictable such as electrical transformers, oil storage areas, and transportation fueling systems. The Oil Stop Valve is the most cost effective method to prevent a major disaster.

OSV Options

SLAVE VALVE - The slave is added to an Oil Stop Valve to allow the main float to reopen. Due to lack of water the main float will close. When additional rain water enters the sump, the slave valve float will open and allow water to enter the Oil Stop Valve Body. As the water level rises the main float will open due to water pressure pushing up against the bottom of the main float. In the event of an oil spill, the slave valve float and the main float will close containing the spill.

LEVEL SWITCH

FREEZE PROTECTION

HOW TO PICK THE PROPER VALVE TYPE & SIZE FOR YOUR APPLICATION

PVC

PVC models are the most economical way to prevent bulk hydrocarbon spills. Corrosion resistant PVC construction is an ideal choice for warm climates.

STAINLESS STEEL NOT EXTENDED

Stainless steel not extended models are used in lieu of PVC units in colder climates which may eliminate the necessity for an electric freeze protection package.

STAINLESS STEEL EXTENDED

Stainless steel extended model is our most popular valve if fire is possible. By extending the pipe thru the sump wall, there is no connection inside the sump to burn and fail.

VALVE SIZE

4" DIAMETER
6" DIAMETER
8" DIAMETER
10" DIAMETER
12" DIAMETER

(MAX) FLOW RATE

160 GPM
360 GPM
600 GPM
900 GPM
1400 GPM

WARNING: EXCEEDING THESE FLOW RATES MAY CAUSE PREMATURE CLOSING.

AFL RECOMMENDS:

- Sanitary catch basin used to prevent premature valve closure due to leakage.
- 4' diameter catch basin for the OSV-4 and OSV-6, and a 5' diameter for the OSV-8, OSV-10 and OSV-12.



A Division of RGF Environmental Group, Inc.

AFL INDUSTRIES

1101 West 13th Street

Riviera Beach, Florida 33404

(561) 844-5200

PRODUCT BULLETIN

NO. 2-05.B.1

PRIMARY TREATMENT

VERTICAL TUBE COALESCING SEPARATOR (VTC)

0-500 GPM IN A SINGLE STRUCTURE

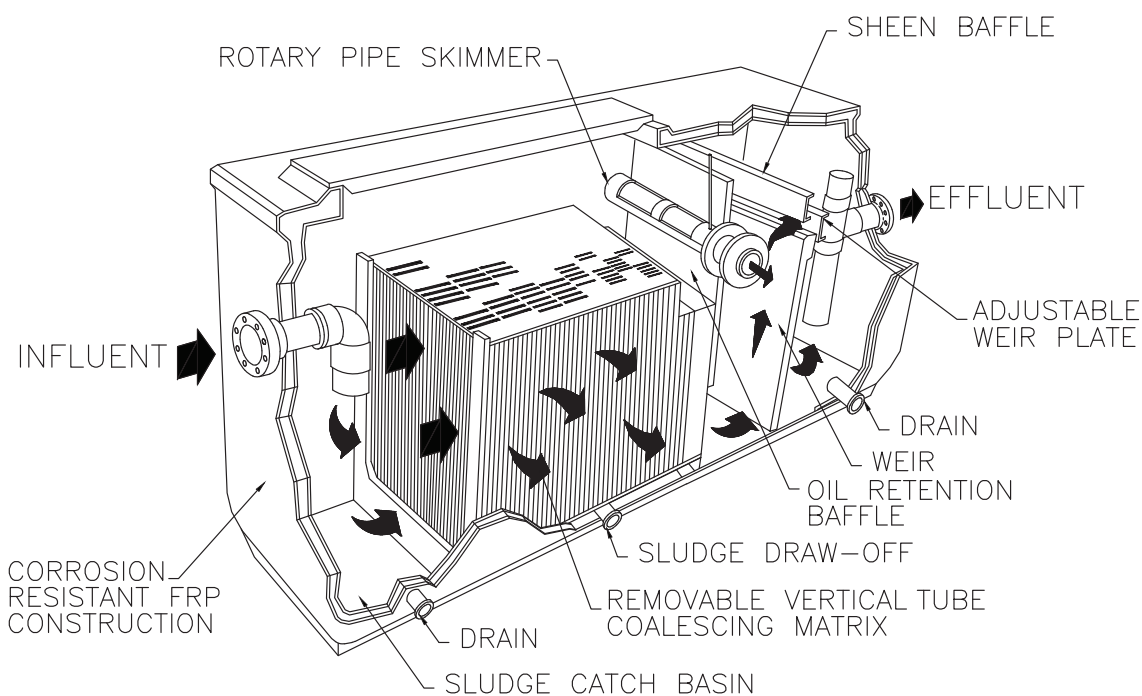
600 GPM AND GREATER REQUIRE MULTIPLE STRUCTURES

FUNCTION

REMOVES FREE OILS

NON-PERMANENT MECHANICALLY EMULSIFIED OILS

SETTLABLE SOLIDS



ENGINEERING A BETTER ENVIRONMENT

FEATURES

More efficient separation

Flow rates: 5-2,500 GPM

Low heat transfer, less than 1.0 U factor

Corrosion-resistant throughout

Pre-engineered, prepackaged, ready to install

Self contained, no power source required

Built-in oil storage (optional)

The VTC removes hydrocarbons and settleable solids from industrial wastewater and coolant. In operation, this separator accepts industrial liquid waste in the inlet chamber. Here settleable solids fall to the bottom as sludge for periodic removal.

Then the waste stream enters the coalescing separation chamber. A matrix of vertically-positioned polypropylene tubes gives laminar flow characteristics to the liquid. The results is a liquid more responsive to gravity separation.

The tubes also provide a coalescing medium. Oleophilic innature, they attract small oil globules which coalesce with other globules, increase in size and buoyancy, then break away to rise through the tubes to the top. Surface oil drains by gravity into a rotary pipe skimmer for discharge to a storage facility.

Performance that can be expected of the VTC separator is:

1. Removal of oil globules down to **20-micron size**
2. Reduction of oil content to **10mg/ltr/10ppm.**

The VTC removes even non-permanent mechanically emulsified oil. It leaves no visible sheen and traps the solids too. In metalworking and similar applications, it removes more than 99 percent of tramp oils from coolants.

The VTC incorporates a molded fiberglass construction. Internally reinforced, the structure withstands severe soil and hydraulic loadings.

The entire surface is covered with corrosion-resistant gel coat, integrally-colored and ultra-violet resistant. Since the envelope and fittings are corrosion-resistant, the separator can be installed in many hostile environments. No sacrificial cathodic protection is required.

Equipment and construction options are available. These include heater packages, sludge removal provisions, effluent pump-out systems, built-in oil storage tank, oil stop valve and special resins or stainless steel construction.

VTC Options

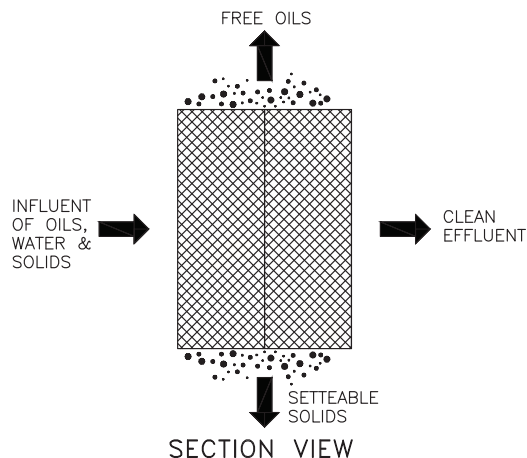
Ladders and Hand Rails
Height Extension
Internal Oil Storage
Separate Oil Storage
Manifolding In and Out
Oil Stop Valve Installed

Stainless Steel Construction
Special Resins
FRP Piping
CPVC Piping
Delta Packs

Freeze Protection - Elect
Influent Pumps Air and Elect
Effluent Pumps Air and Elect
Sludge Pumps Air and Elect
Level Switch Oil and Water
Nema 4x and Nema 7 Packages
Floating Skimmers - Air Only

TUBES REMOVE OIL

VERTICAL TUBE COALESCING
PRINCIPLE OF OPERATION



At the heart of the AFL Industries separator is a unique vertical-tube coalescer. Tubes reduce free oil content of effluent down to **10 mg/ltr/10ppm**, or less. The growing oil globules, when sufficiently buoyant, break free to rise to the surface. The random tube matrix provides laminar flow essential for proper separation. Small oil droplets are attached to the virgin-polypropylene tube matrix because of its oil-attracting characteristics. Once attached, they provide additional surface area to the tubes while attracting other small oil droplets with their own inherent properties. This process combines oil droplets until they are large enough to rise to the surface to await periodic removal. The coalescer is lightweight and removable for maintenance.



A Division of RGF Environmental Group, Inc.

AFL INDUSTRIES

Copyright RGF©2013

1101 W. 13th Street Riviera Beach, Florida 33404 (561) 844-5200

A Division of RGF Environmental Group, Inc. www.aflindustries.com



A Division of RGF Environmental Group, Inc.

AFL INDUSTRIES

1101 West 13th Street

Riviera Beach, Florida 33404

(561) 844-5200

PRODUCT BULLETIN

PRIMARY TREATMENT

VERTICAL TUBE COALESCING SEPARATOR (CVF)

0-100 GPM IN A SINGLE STRUCTURE

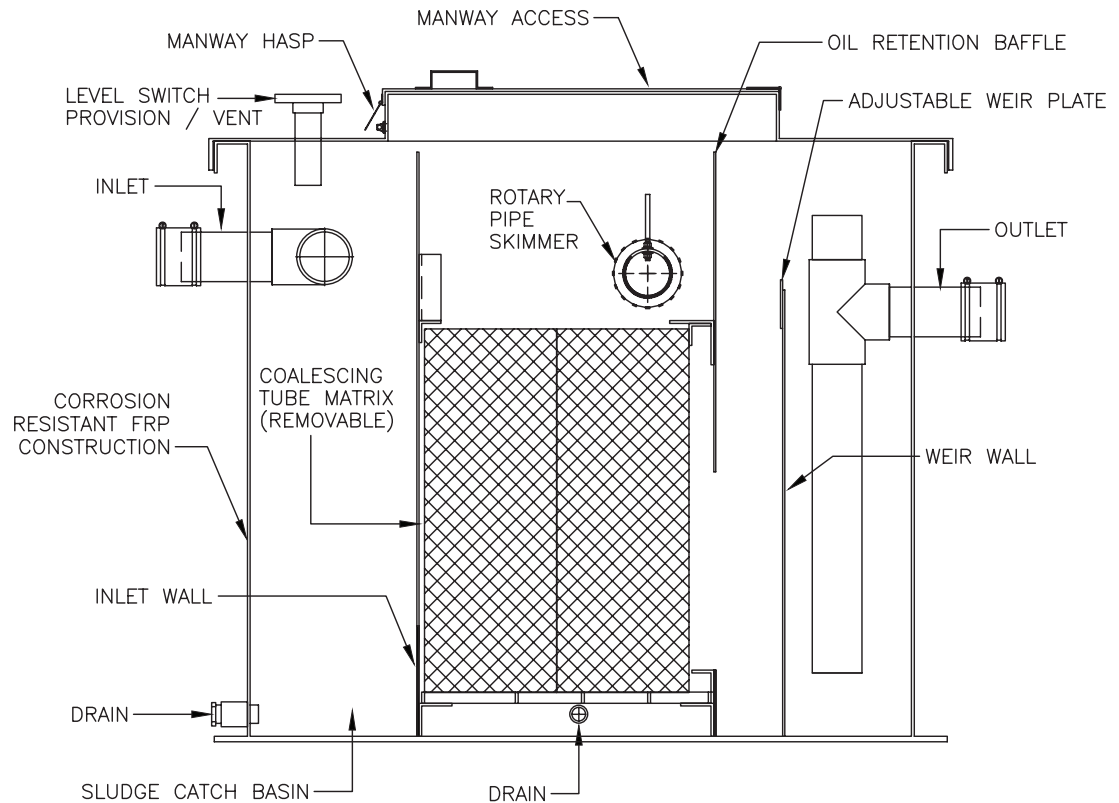
NO. 2-15.B.1

FUNCTION

REMOVES FREE OILS

NON-PERMANENT MECHANICALLY EMULSIFIED OILS

SETTLEABLE SOLIDS



FEATURES

More efficient separation

Flow rates: 0-100 GPM

Low heat transfer, less than 1.0 U factor

Corrosion-resistant throughout

Pre-engineered, prepackaged, ready to install

Self contained, no power source required

Built-in oil storage (optional)

The CVF removes hydrocarbons and settleable solids from industrial wastewater and coolant. In operation, this separator accepts industrial liquid waste in the inlet chamber. Here settleable solids fall to the bottom as sludge for periodic removal.

Then the waste stream enters the coalescing separation chamber. A matrix of vertically-positioned polypropylene tubes gives laminar flow characteristics to the liquid. The results is a liquid more responsive to gravity separation.

The tubes also provide a coalescing medium. Oleophilic in nature, they attract small oil globules which coalesce with other globules, increase in size and buoyancy, then break away to rise through the tubes to the top. Surface oil drains by gravity into a rotary pipe skimmer for discharge to a storage facility.

ENGINEERING A BETTER ENVIRONMENT



Performance that can be expected of the CVF separator is:

1. Removal of oil globules down to **20-micron size**
2. Reduction of oil content to **10mg/ltr/10ppm.**

The CVF removes even non-permanent mechanically emulsified oil. It leaves no visible sheen and traps the solids too. In metalworking and similar applications, it removes more than 99 percent of tramp oils from coolants.

The CVF incorporates a molded fiberglass construction. Internally reinforced, the structure withstands severe soil and hydraulic loadings.

The entire surface is covered with corrosion-resistant gel coat, integrally-colored and ultra-violet resistant. Since the envelope and fittings are corrosion-resistant, the separator can be installed in many hostile environments. No sacrificial cathodic protection is required.

Equipment and construction options are available. These include heater packages, sludge removal provisions, effluent pump-out systems, built-in oil storage tank, and special resins or stainless steel construction.

CVF Options

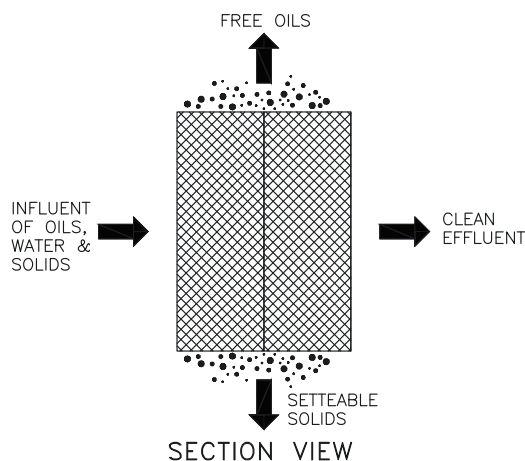
Height Extension
Internal Oil Storage
Separate Oil Storage
Stainless Steel Construction
Special Resins

FRP Piping
CPVC Piping
Delta Packs
Freeze Protection - Elect
Influent Pumps Air and Elect

Effluent Pumps Air and Elect
Sludge Pumps Air and Elect
Level Switch Oil and Water
Nema 4x and Nema 7 Packages
Floating Skimmers - Air Only

TUBES REMOVE OIL

VERTICAL TUBE COALESCING PRINCIPLE OF OPERATION



At the heart of the AFL Industries separator is a unique vertical-tube coalescer. Tubes reduce free oil content of effluent down to **10 mg/ltr/10ppm**, or less. The growing oil globules, when sufficiently buoyant, break free to rise to the surface. The random tube matrix provides laminar flow essential for proper separation. Small oil droplets are attached to the virgin-polypropylene tube matrix because of its oil-attracting characteristics. Once attached, they provide additional surface area to the tubes while attracting other small oil droplets with their own inherent properties. This process combines oil droplets until they are large enough to rise to the surface to await periodic removal. The coalescer is lightweight and removable for maintenance.



AFL Industries, 1101 West 13th St, Riviera Beach, FL 33404
PHONE: (561) 848-1826 FAX: (561) 848-9454
E-Mail: Sales@aflindustries.com

**AFL
MODEL
OSV-8
w/ Slave Valve**

**INSTALLATION, OPERATION &
MAINTENANCE BROCHURE**

AFL INDUSTRIES
1101 WEST 13TH STREET
RIVIERA BEACH, FL 33404

TABLE OF CONTENTS

About the Product	Page 1
Installation Overview	I-O-M: 12.14
General Instructions	I-O-M: 0.01
Operation & Maintenance Instructions	I-O-M: 8.10
Oil Stop Valve Maintenance	I-O-M: 12.7
Equipment Specifications	Contract
8"□ Oil Stop Valve	Drawing
Float Guide Lift Cable	Drawing

The Oil Stop Valve by AFL

The AFL Oil Stop Valve prevents discharge of separated oil to sewers and streams.

Features:

- Dependable gravity operation
- Single moving part
- Large flow capacity
- Self-opening (optional)
- No power requirement
- Corrosion resistant construction
- Flow rates to 1400 GPM through a single valve
- Discharge heights and direction can be custom engineered for your specific application.
- ASTM 150 Lb. bolt together discharge flanges are available upon request.
- High water flashing light and or audible alarms are available. Either on site or remote.

Large, unpredictable oil spills can defeat the most conservatively designed pollution control system. But while the cost of such a system can be prohibitive, the consequences of not controlling a spill can be equally catastrophic. The AFL Oil Stop Valve (OSV) is designed to solve these problems.

Oil Stop Valves confine even large oil spills to the premises. The OSV is available from AFL prepackaged in a fiberglass or steel catch basin or as an option on AFL oil/water separators. In addition, the OSV is available separately for installation in existing separators, catch basins or manholes.

The OSV has only one moving part, a ballasted float set at a specific gravity between that of oil and water. When an oil spill occurs, the float loses buoyancy as the oil level increases until it finally seats itself on the discharge port. Thus, the oil spill is confined.

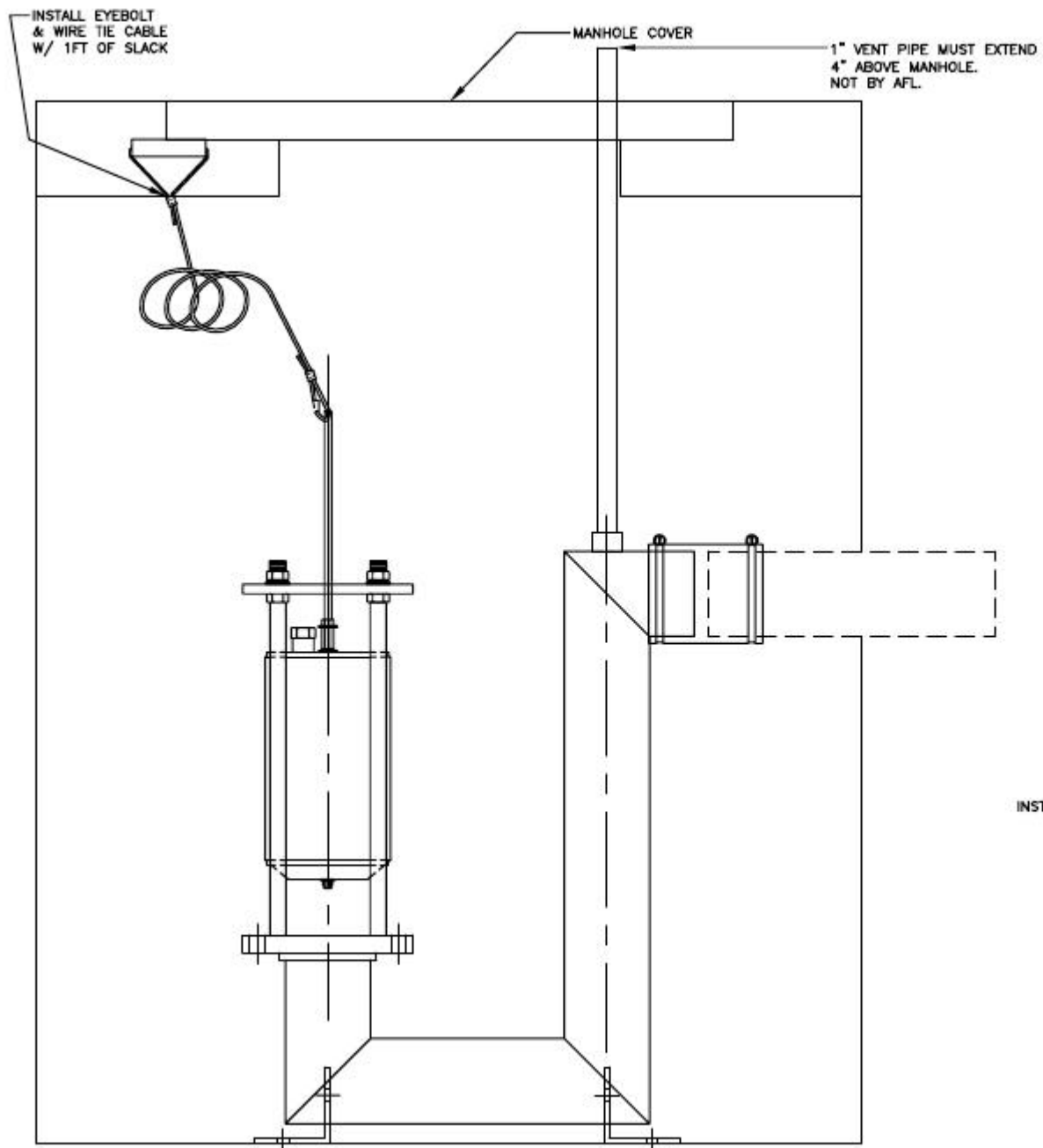
The Oil Stop Valve is fabricated from non-corrosive PVC and stainless steel. Standard sizes are 4", 6", 8", 10", 12" discharge piping. Larger piping systems can be accommodated by manifolding units together. Optional screening can be provided if necessary to prevent the discharge of large floating solids.

Consider the OSV for those applications where oil spills are possible, but unpredictable such as electrical transformers, oil storage areas, and transportation fueling systems. The Oil Stop Valve is the most cost effective method to prevent a major disaster.

SERVICE	INSTALLATION OVERVIEW
MANUAL	OSV- 4 THROUGH OSV-8"
PRODUCT	OIL STOP VALVE
	STAINLESS STEEL VERSION

1. Lower valve into manhole.
2. Align outlet pipe to manhole outlet to check for proper elevation.
3. Move valve approximately 6" away from manhole outlet pipe.
4. Install AFL supplied flexible PVC boot and clamps onto valve outlet pipe.
Do Not Tighten at this time.
5. Reposition valve to allow PVC boot to connect to manhole outlet pipe.
6. Tighten clamps.
7. Measure the distance from 4" above the top of the manhole to the top of the 1" female coupling on the discharge elbow.
8. Cut the 1" galvanized pipe (not by AFL) to previously measured length and install.
9. Install (4) 3/8" ϕ S.S. anchors thru valve base to secure in place.
10. Install eyebolt and attach float lift cable to the top of the manhole where it can be easily reached from the manhole cover area to manually open the valve when necessary and to keep the cable from getting caught between the valve float and the valve seat.
11. Fill the manhole with clean water until it reaches the invert of the outlet.
12. Pull up slightly on lift cable to make sure float is free of the seat.
13. Test float by pushing downward on float guide rod. If movement occurs, release pressure and the rod will rise to original position.
14. Using cable ties, connect lift cable and handle to previously installed eyebolt while allowing the float to travel downwards approximately 12".

UNIT IS NOW READY FOR SERVICE.



INSTALLATION OVERVIEW PAGE 2

I-O-M: 12.14

**SERVICE
MANUAL**

**GENERAL
INSTRUCTIONS**

Page 1 OF 1

PRODUCT:

OIL STOP VALVES

CONTRACTOR - PLEASE READ THIS

INSTRUCTION CAREFULLY

AFL Industries provides you with several valuable aids, and the few minutes you spend reading this instruction will save you hours later. The purpose of this instruction is to acquaint you with the equipment-erecting knowledge which you now have at your fingertips.

THE INFORMATION CONTAINED IN THESE INSTRUCTIONS IS BASED ON YEARS OF EXPERIENCE WITH THE ERECTION OF OUR EQUIPMENT, BUT IS INTENDED AS A GUIDE ONLY. THE EQUIPMENT WHICH YOU HAVE AVAILABLE TO YOU MAY DICTATE OTHER, MORE CONVENIENT, PROCEDURES, BUT THE FINAL RESPONSIBILITY FOR SELECTION OF ERECTION PROCEDURES OR TOOLS IS NOT BORNE BY AFL INDUSTRIES, INC.

IOM BROCHURE

This brochure contains the heart of the information necessary to erect the equipment. It is structured as follows:

1. Title Page and General Instructions;
2. Table of Contents - listing of descriptions and reference numbers for all drawings;
3. Specific Contract Information.

The complete section of information provided for each contract includes:

1. Contract Equipment Specification - a written description of the equipment;
2. Installation Instructions - a general erection instruction for the equipment provided;
3. Assembly Drawings - showing the unit and its various components;
4. Operation and Maintenance Instructions;

FURTHER ASSISTANCE

The erection aids material provided by AFL should enable you to install, operate, and maintain the equipment. This instruction is provided to help you to help yourself, and therefore, to save you time and expense. If a problem is encountered in installing or operating the equipment which cannot be solved by referring to the available material, please feel free to contact us. Address your inquiry to our Technical Service Department, AFL Industries, Inc., 1101 West 13TH Street., Riviera Beach, Florida 33404, or call us at 561-848-1826. Our website address is **WWW.AFLINDUSTRIES.COM**.

PRINCIPLE OF OPERATION

The valve operates on a buoyancy principle. The ballasted float, which is the only moving part, is weighted for a specified gravity of 0.95. In the water, the float will float and keep the valve open.

An accumulation of oil around the float will decrease the buoyant force on the float causing it to float lower in the liquid. As the oil accumulation increases, the float will sink lower and finally close the valve when the oil level is approximately 3" to 4" above the bottom of the float.

OSV OPERATION

The AFL Oil Stop Valve (OSV) is designed for easy, efficient operation in confining oil spills to the premises. It is used in oil/water gravity differential separators, coalescing type separators and oil manholes to prevent the entry of oil into the effluent.

Features of the valve include:

1. Dependable gravity operation
2. Corrosion-resistant construction
3. Only one moving part
4. Outlet vent connection (siphon breaker)

The valve is available in a variety of sizes to meet a wide range of flow conditions.

The valve is supplied as an option on AFL oil/water separators and oil interceptors. It can also be provided independently for existing applications for similar equipment.

Occasionally valves are fabricated with a "weep hole" which facilitates reopening of the valves after closure due to oil spill. The weep hole equalizes the pressures in the valve and will pass a minimal amount of oil/water mixture. **This option is only added upon the customer's written request.**

On applications where this minimal discharge is objectionable, the weep hole is eliminated. In such cases, and after the valve closes due to oil spill, the valve must be re-opened manually by lifting the float by pulling on lift cable.

WARNING:

UPON VALVE CLOSURE, DUE TO A SPILL, THE OIL COLLECTED IN THE SUMP, TANK OR OIL SEPARATOR, MUST BE EVACUATED FROM THE VALVE CHAMBER AND DISPOSED OF PROPERLY. AFTER THE OIL HAS BEEN REMOVED, FILL CHAMBER WITH CLEAN WATER AND RE-OPEN THE VALVE BY LIFTING THE FLOAT BY PULLING ON LIFT CABLE. THE SAME PROCEDURE MUST BE USED DURING PROCESS START UP.

THE ABOVE DESCRIBED PROCEDURE ON RE-OPENING OF THE VALVE IS ESPECIALLY CRITICAL ON STOP VALVES WITHOUT WEEP HOLES.

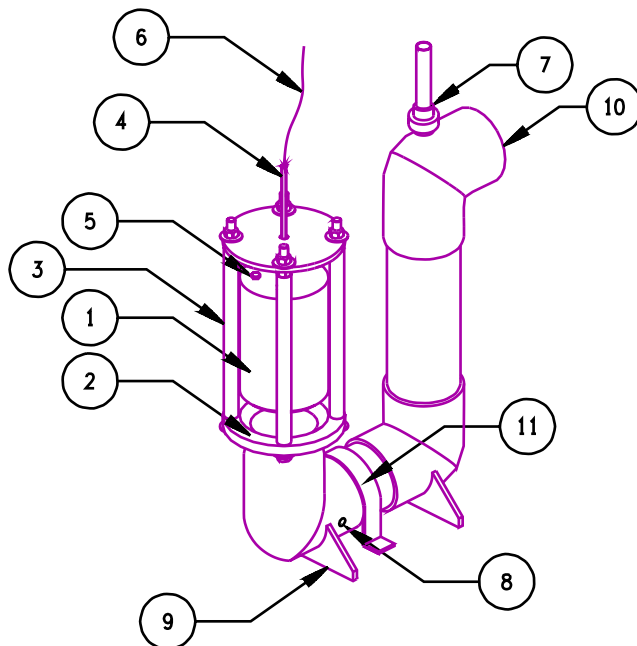
SERVICE
MANUAL

OPERATION AND MAINTENANCE
INSTRUCTIONS

PAGE 2 OF 5

PRODUCT:

OIL STOP VALVE



ASSEMBLY LIST

- (1) FLOAT
- (2) FLOAT SEAT
- (3) RETAINING RODS
- (4) FLOAT GUIDE
- (5) BALLAST ACCESS HOLE
- (6) 1/8"Ø MANUAL RELEASE CABLE
- (7) 1"Ø SIPHON BREAKER UNION
(SIPHON BREAKER PIPE NOT BY AFL.)
- (8) WEEP HOLE
- (9) LEGS
- (10) DISCHARGE ELBOW
- (11) HOLD-DOWN STRAP

INSTALLATION INSTRUCTIONS:

NOTE: OSV discharge pipe (Plain ends) are shipped loose (not glued to the discharge elbow). The contractor, at his discretion, may solvent glue to the valve discharge elbow, or select other suitable means for connecting OSV

**SERVICE
MANUAL**

**OPERATION AND MAINTENANCE
INSTRUCTIONS**

PAGE 3 OF 5

PRODUCT: OIL STOP VALVE

discharge to outlet pipe.

a) Plain End Connections

All valves with plain end connections are supplied with PVC coupling and two stainless steel worm drive hose clamps. Slide the coupling on valve discharge and install the clamps by sliding them on the coupling.

Line up the valve discharge with outlet pipe, leave 1/4" gap between pipe ends, and slide this coupling and clamp on the outlet pipe. Do not tighten the hose clamps at this time.

b) Flanged End Connections

Line up the flange bolt holes, insert a gasket and bolt flanges. Do not tighten bolts at this time.

WARNING: FLANGES SUPPLIED WITH THE VALVES ARE FLAT FACE; MAKE SURE THE MATING FLANGE IS OF THE SAME DESIGN. USE OF RAISED FLANGES WILL BREAK THE PVC FLANGES.

C. Anchorage

1. OSV valves are supplied with hold down straps, which are designed to secure the valves to the concrete. After the valve has been lined up with outlet nozzle, install the strap on the valve body and use the two holes as a template for locating the anchor bolts.
2. Remove straps and drill in anchors.
3. Replace the strap and bolt down the strap.

D. Siphon Breaker

1. Siphon breaker connection is located on the valve discharge elbow and is furnished with a union to facilitate installation of siphon breaker pipe.
2. In order to calculate siphon breaker pipe length, determine the maximum liquid level in the sump/tank at a spill condition, subtract elevation of the top of the OSV discharge pipe from maximum liquid level and add 1'-6".

After the length of the pipe has been cut, attach the pipe to the union using PVC solvent cement.

Install the siphon breaker pipe on the valve and support it as required.

NOTE: Ideally, the top of the pipe should be as close to grade as possible.

WARNING: IMPROPER SIPHON PIPE ELEVATION WILL RESULT IN OIL DISCHARGE THROUGH THE SIPHON BREAKER DURING SPILL CONDITION.

CAPACITIES

A minimum recommended water level, sufficient to completely submerge the float housing, is required for proper operation of the OSV. Operation at less than the minimum recommended water level will reduce the capacity of the OSV.

The recommended operating flow rate versus its associated head loss is shown in **Figures 2.01 through 2.03**.

NOTE: For the valve to operate properly at required flow(s), the valve discharge pipe centerline must be below the liquid level at a distance equal to (or greater than) the associated head loss.

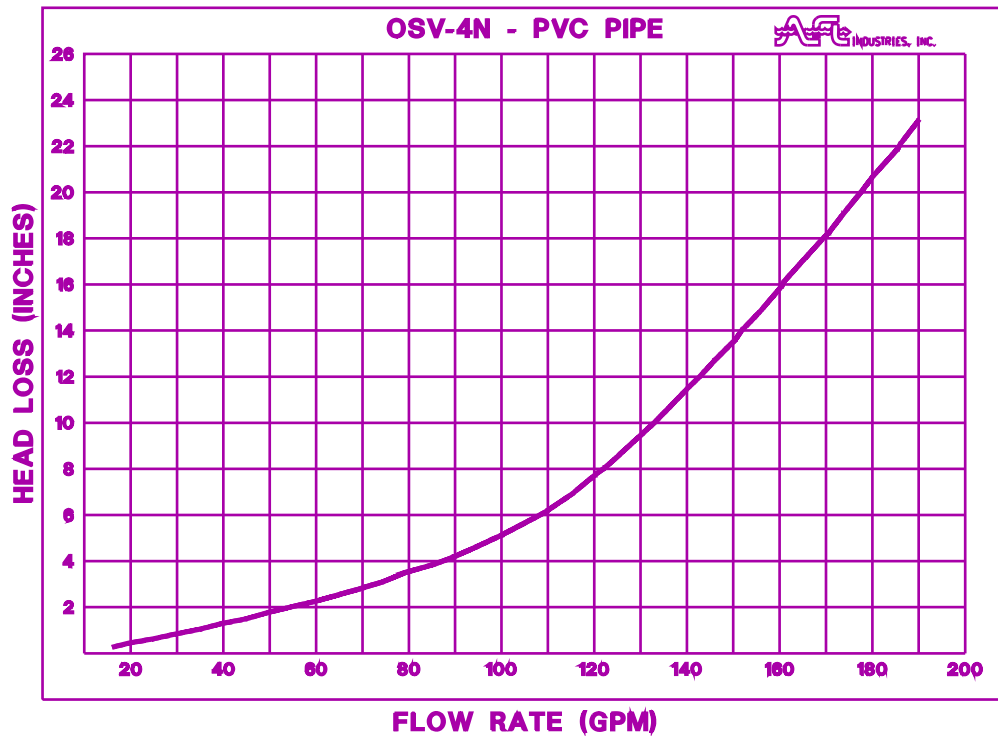


Figure: 2.01 OSV-4 HEAD LOSS VS. FLOW RATE

WARNING: IF THE VALVE IS OPERATED AT GREATER THAN DESIGN OR RECOMMENDED FLOWS IT MAY SHUT OFF AUTOMATICALLY, WHICH MAY NECESSITATE THAT THE VALVE BE REOPENED MANUALLY.

PRODUCT:

OIL STOP VALVE

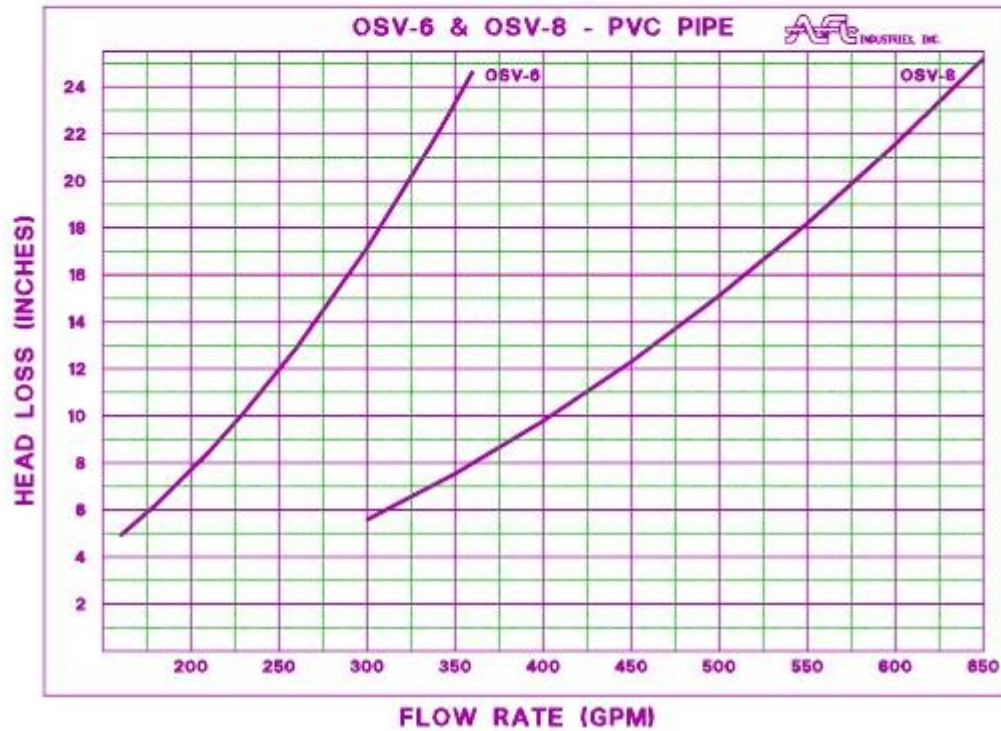


FIG. 2.02

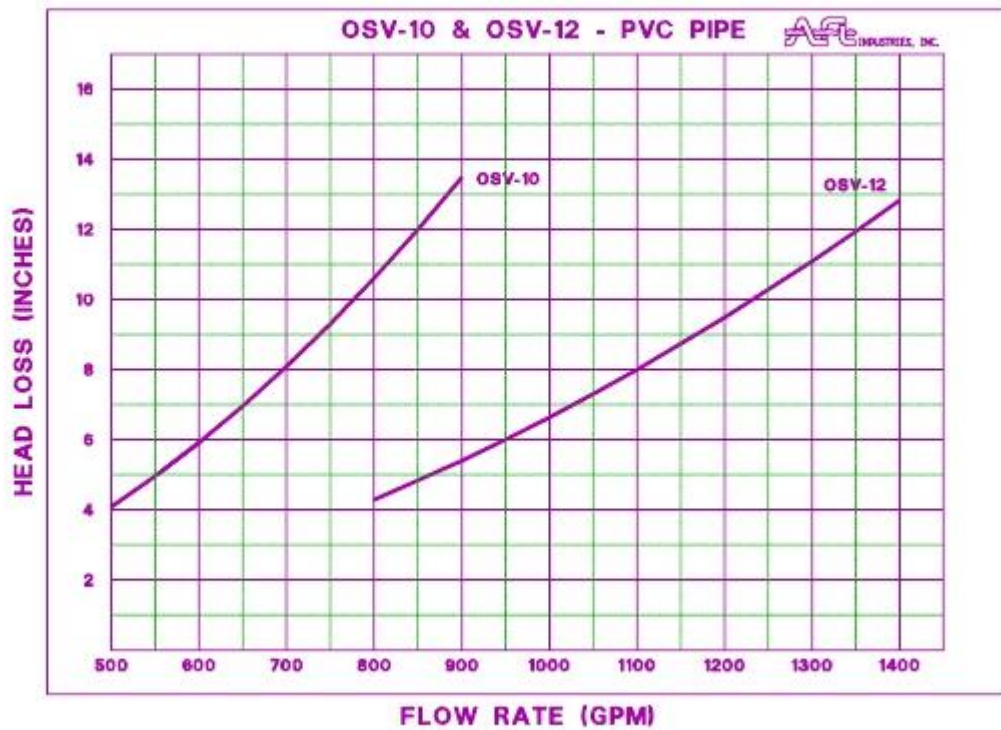


FIG. 2.03

OSV MAINTENANCE

Please read entire page before performing maintenance

- 1.** Remove floating debris.
- 2.** Remove solids from bottom of sump as required. 6" of build up maximum.
- 3.** With water level in sump at outlet invert gently push guide rod downwards approximately 6". This will allow float to come in contact with the bottom flange.
- 4.** Release guide rod. The rod should rise up to the original position. If this procedure was successful the valve is in proper working order. Occasionally the float will stay seated on the bottom flange when pushed down. Simply pull upwards on the stainless steel cable attached to the guide rod. This will break the suction and allow the float to rise. If when attempting to push guide rod downwards and it appears to be stuck, pull up on stainless steel cable to raise the float again approximately 6". If float rises release cable. If the float sinks it is inoperable and must be replaced.
- 5.** This procedure should be performed at least yearly.
- 6.** No other maintenance is required.

**AFL INDUSTRIES
1101 WEST 13TH STREET
RIVIERA BEACH, FL 33404**

AFL OIL STOP VALVE SPECIFICATION

Application	Oil Spill Prevention
Model Number	OSV-8 (SS)
Number of Units	One (1)

Each unit will conform to the following specifications:

Description	Fabricated control valve designed to control Oil spills. Valve assembly shall consist of Base, guides, inlet housing, float, and Outlet connection. Valve shall be designed To operate on specific gravity differential principle.
Float Weight	Ballasted for 0.95 Sp. Gr.
Flow	600 GPM Gravity (MAX.)
Inlet Size	8" Diameter
Outlet Connection	8" Diameter plain end pipe with flexible Connector and clamps.
Vent	1" (SS) threaded coupling located on top of discharge pipe. Vent pipe to extend above max. oil level to be supplied by contractor. Material to be galvanized pipe.
Coupling	1" SST threaded coupling and plug located on side of discharge pipe for future use.

**AFL INDUSTRIES
1101 WEST 13TH STREET
RIVIERA BEACH, FL 33404**

Materials of Construction

Base, Housing &
Outlet Piping

304L (SS)

Float

SST w/ Teflon Seat

Float Guides

Type 304 (SS) & 304L (SS) sleeves.

Design Requirements:

Pressure Rating

Atmospheric

Temperature

Ambient with 130°F maximum

Valve to be shipped completely assembled by **AFL INDUSTRIES** for field installation by customer.

**AFL INDUSTRIES
1101 WEST 13TH STREET
RIVIERA BEACH, FL 33404**

AFL-STD

SLAVE VALVE SPECIFICATION

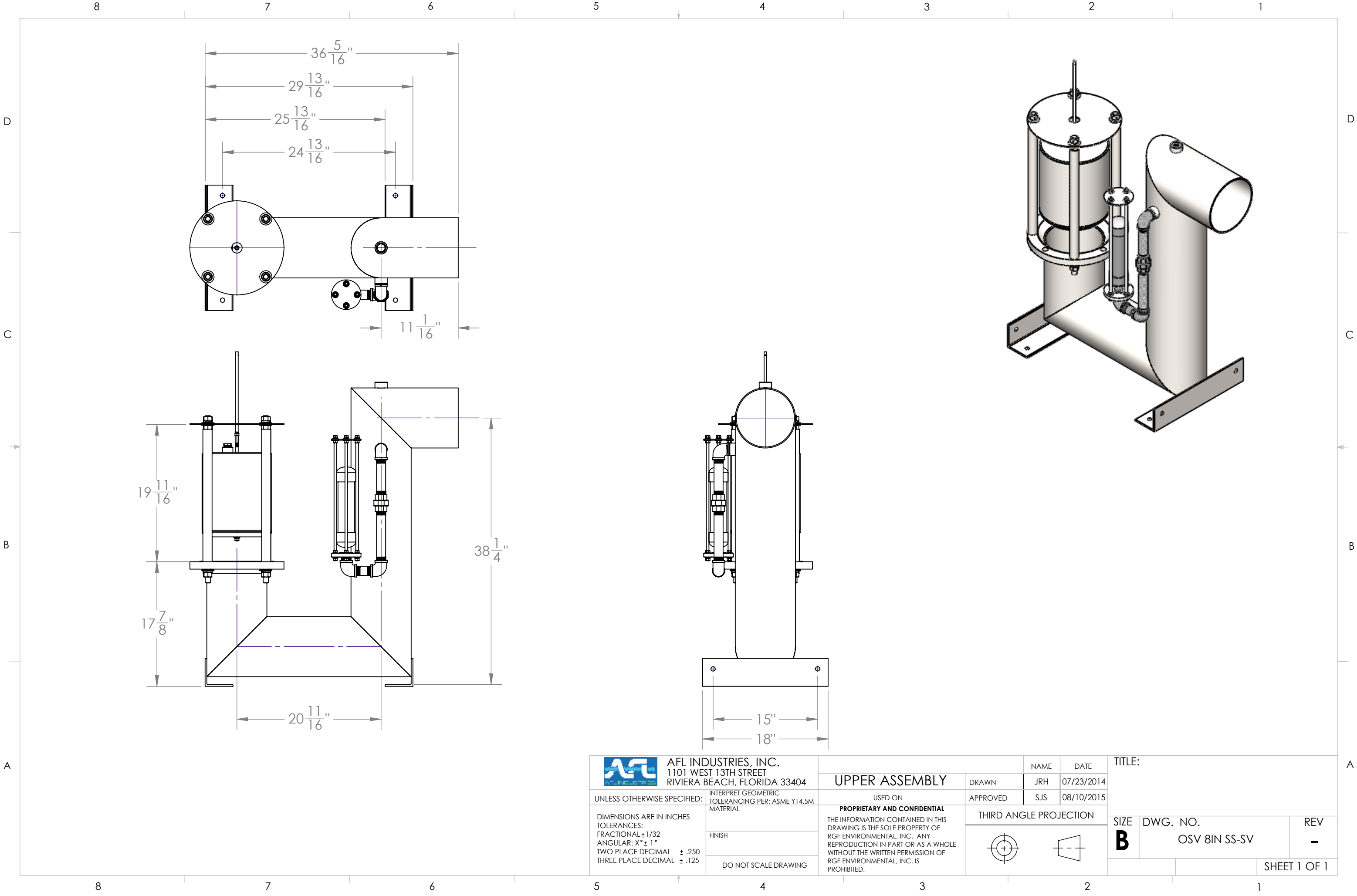
Application	Oil Spill Prevention
Model Number	SV-S.S/PVC
Description	Fabricated to reopen our oil stop Valves in the event of water loss (Leakage, Evaporation, Etc.)
Float Weight	Ballasted for .95 Sp. Gr.




Materials of Construction

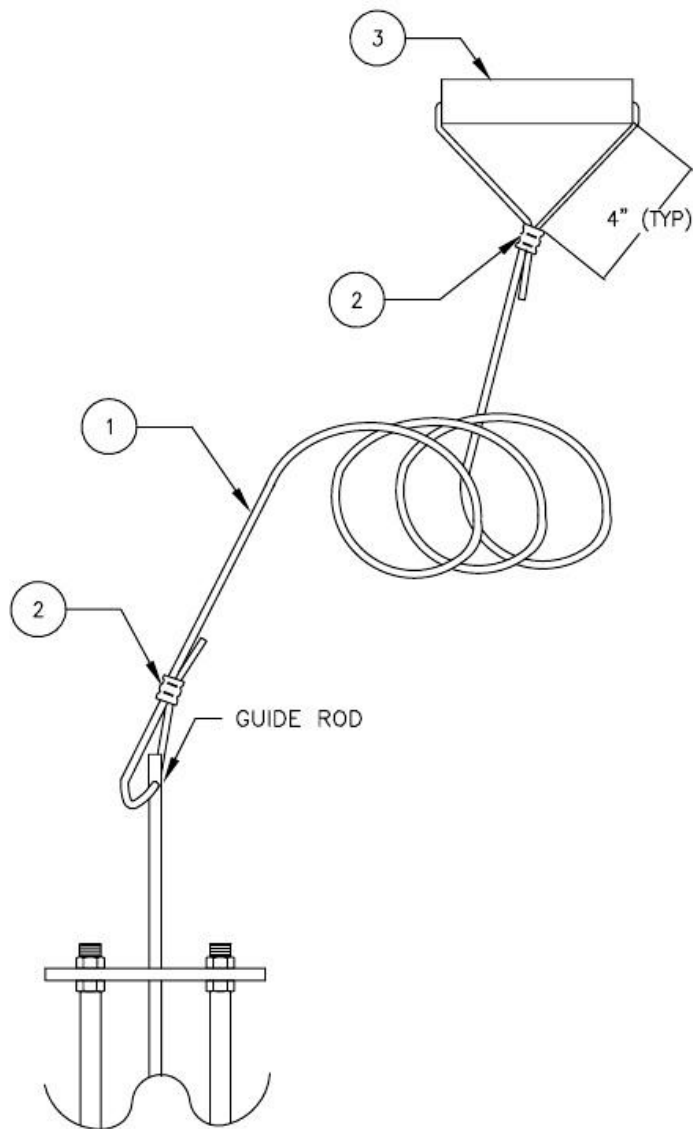
Base, Housing & Piping	S.S.
Float	PVC
Float Guides	Type 304 Stainless Steel
Pressure Rating	Atmospheric
Temperature	Ambient with 130°F Max.

PRINCIPLE OF OPERATION

The slave valve is added to an oil stop valve to allow the main float to reopen. Due to the lack of water the main float will close. When additional rain water enters the sump, the slave valve float will open and allow water to enter the oil stop valve body. As the water level rises the main float will open due to water pressure pushing up against the bottom of the main float. In the event of an oil spill , the slave valve float and the main float will close containing the spill.



		AFL INDUSTRIES, INC.		NAME		DATE		TITLE:	
		1101 WEST 13TH STREET RIVIERA BEACH, FLORIDA 33404		UPPER ASSEMBLY		DRAWN JRH 07/23/2014			
UNLESS OTHERWISE SPECIFIED:		INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5M MATERIAL		USED ON		APPROVED		SJS 08/10/2015	
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/32$ ANGULAR: $X^{\circ} \pm 1^{\circ}$ TWO PLACE DECIMAL $\pm .250$ THREE PLACE DECIMAL $\pm .125$				PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF RGF ENVIRONMENTAL, INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF RGF ENVIRONMENTAL, INC. IS PROHIBITED.		THIRD ANGLE PROJECTION  			
		FINISH						SIZE	
								DWG. NO.	
								OSV 8IN SS-SV	
								REV	
								-	
								SHEET 1 OF 1	



QTY	ITEM	DESCRIPTION	MAT
1	1	CABLE 1/16"Ø X 10' LG.	S.S.
2	2	CRIMP FOR 1/16"Ø CABLE	S.S.
1	3	1/2" SCH 80 PIPE X 4" LONG	PVC



SCALE: NONE	THIS DRAWING AND SPECIFICATION IS THE PROPERTY OF AFL INDUSTRIES, 1751 WEST 10TH STREET, PINEHURST BEACH, FLA. 33464 AND SHALL NOT BE REPRODUCED WITHOUT WRITTEN PERMISSION.	DRAWN BY:
DATE:		CHECKED BY:
MODEL: FLOAT GUIDE LIFT CABLE		AFL JOB No. AFL
JOB: AFL	DRAWING No. 1000	