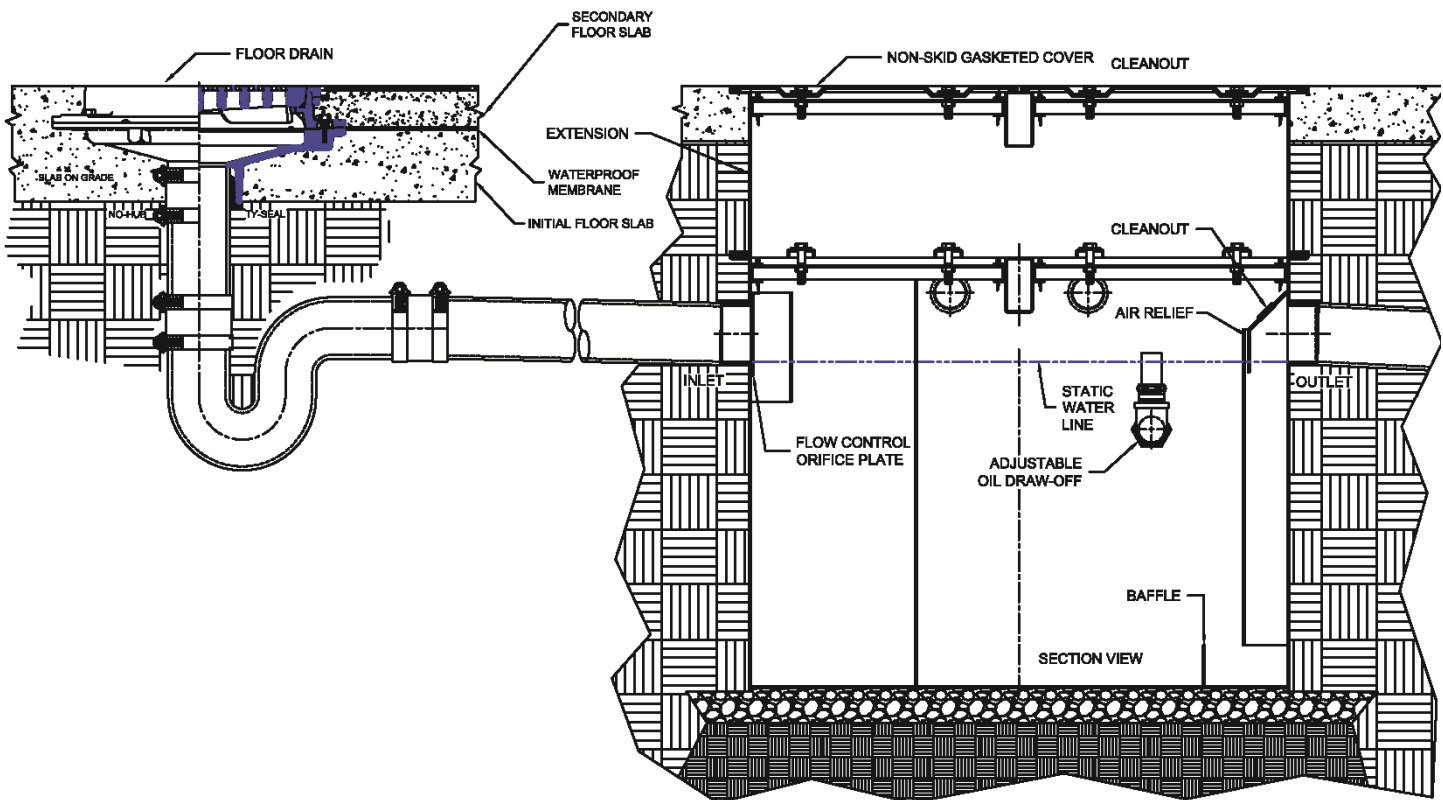


**OPERATION, INSTALLATION AND MAINTENANCE INSTRUCTIONS****5400-5500 SERIES INTERCEPTORS**

5401-75-4NH



5500-50-3IPS

**INSTALLATION**

Place the Wade interceptor downstream of the drain which will supply the oil laden liquid. If the interceptor is to be installed below grade, insure an extension is provided to make the centerline of inlet to finished grade dimension. Compacted fill and/or gravel is recommended for support of the combined weight of the interceptor and the weight of the water.

Piping from the appliances can then be routed to the inlet side of the interceptor. Connect piping from the outlet side to the oil interceptor or recovery device. If a flow control device is provided with the grease interceptor, it should be installed between the interceptor and the drain. Complete the piping on the outlet side to the sanitary sewer.

## **OPERATION, INSTALLATION AND MAINTENANCE INSTRUCTIONS**

### **5400-5500 SERIES INTERCEPTORS**

**PURPOSE** Wade oil interceptors have been used in plumbing waste systems to help protect property and the environment against explosion, fire, and pollution for many decades.

Wade oil interceptors are designed similar to the grease interceptors. Both are designed on the principle that oils are lighter than water and thus gravity causes the oil to rise to the surface of the water. Wade oil interceptors come equipped with a removable combination pressure equalizing/flow diffusing baffle and with an optional sediment bucket on the inlet to trap stones, grit and other substances. Their solid flow-diffusing baffle eliminates turbulence and allows for high efficiency of separation.

All Wade 5400 and 5401 oil interceptors are supplied with an adjustable oil draw-off assembly and vent connection. The interceptors are constructed of 100% steel, coated with a gray acid resistant epoxy.

### **HOW THE WADE OIL INTERCEPTOR OPERATES**

Waste water draining to the interceptor passes through the inlet at a controlled rate. As water enters the interceptor, the baffle arrangement reduces turbulence to allow efficient separation. The oil, as separation occurs, floats to the top and is accumulated. The waste water, relieved of contaminants, continues to flow through the trap and into the drainage system. Solids and sludge carried in the water are stopped by the baffle and collected in the solids retaining bucket between the inlet and the flow-retarding baffle. Maximum separation and interception is affected in proportion to the elimination of turbulence of wastewater within the interceptor. The unique Wade baffle/bucket design permits almost 90 percent of the interior of the interceptor to be used for the function of oil separation.

### **FEATURES**

Wade 5400 and 5500 series interceptors are equipped with a tread plate cover secured with hex head machine screws. A soft elastomeric gasket is attached to the body of the interceptor to prevent odor from escaping. An air relief is provided to eliminate siphonage and each unit is sized to insure it will perform to its rated capacity.

### **INSTALLATION**

Install the interceptor as close as practical to the source(s) being served. Avoid installations where long runs of pipe (exceeding 25') are necessary to reach the interceptor. This precaution will preclude the possibility of oil and sludge becoming congealed in the pipe before it reaches the interceptor.

The unit may be placed on the floor, partially recessed in the floor, recessed with the top flush with the floor or encased below the floor in an appropriate housing to accommodate piping and structural considerations. Whatever the installation method, anticipate sufficient clearance to remove the cover and baffles for cleaning. Verify that no obstructions will be placed over the interceptor after installation. A minimum clearance equal the overall height of the interceptor (excluding any extension) is recommended.

Waste with heavy accumulations of sand or solids must bypass the interceptor because the rapid accumulation of solid matter will significantly reduce the rated efficiency of the interceptor. In an application where solids will be present, a solids interceptor should be used.

Placement of a interceptor in a high traffic area is an important concern. If the unit is to be installed flush with the floor, it is necessary to load rate the interceptor cover. The standard Wade interceptor is designed for pedestrian and light traffic only. If heavy loads are anticipated, the interceptor must be specified with an appropriate reinforced cover.

An extension is frequently used to increase the rough-in dimension from the inlet/outlet centerline to the finished floor. The extension anchor flange is not adequate to support the entire interceptor. For installations at flush-with-floor level, the interceptor chamber must rest on solid ground or a concrete pad. For upper floor installations, (suspended above the lower floor ceiling), the interceptor must be independently supported on hangers suitable to carry the entire weight.

A single interceptor serving multiple fixtures or wash down areas is recommended only where the sources are located close together. In these installations, each drain should be individually trapped and vented.

## Recommended Installations

- Commercial Uses Industrial Uses • Filling and Service Stations Machine Shops • Maintenance Garages Refineries
- Airport Hangars Fabrication and Welding Plants • Laundries and Cleaning Establishments • Parking Facilities

## FLOW CONTROL

The interceptor is designed to achieve a predetermined optimum flow rate, thus eliminating turbulence and to regulate surges in the drainage line. The Wade flow control must be installed properly in every installation. An oil interceptor correctly designed to separate oil and light density substances from wastewater, will not by itself govern or regulate the flow of water through it at all times to sufficiently assure the flotation separation of the entrained substances which are to be intercepted at maximum efficiency.

The flow control device, designed with an integral orifice, gives a pre-determined optimum flow rate and thus assures the elimination of turbulence in the oil interceptor, which could otherwise occur from sudden surges through the drainage line.

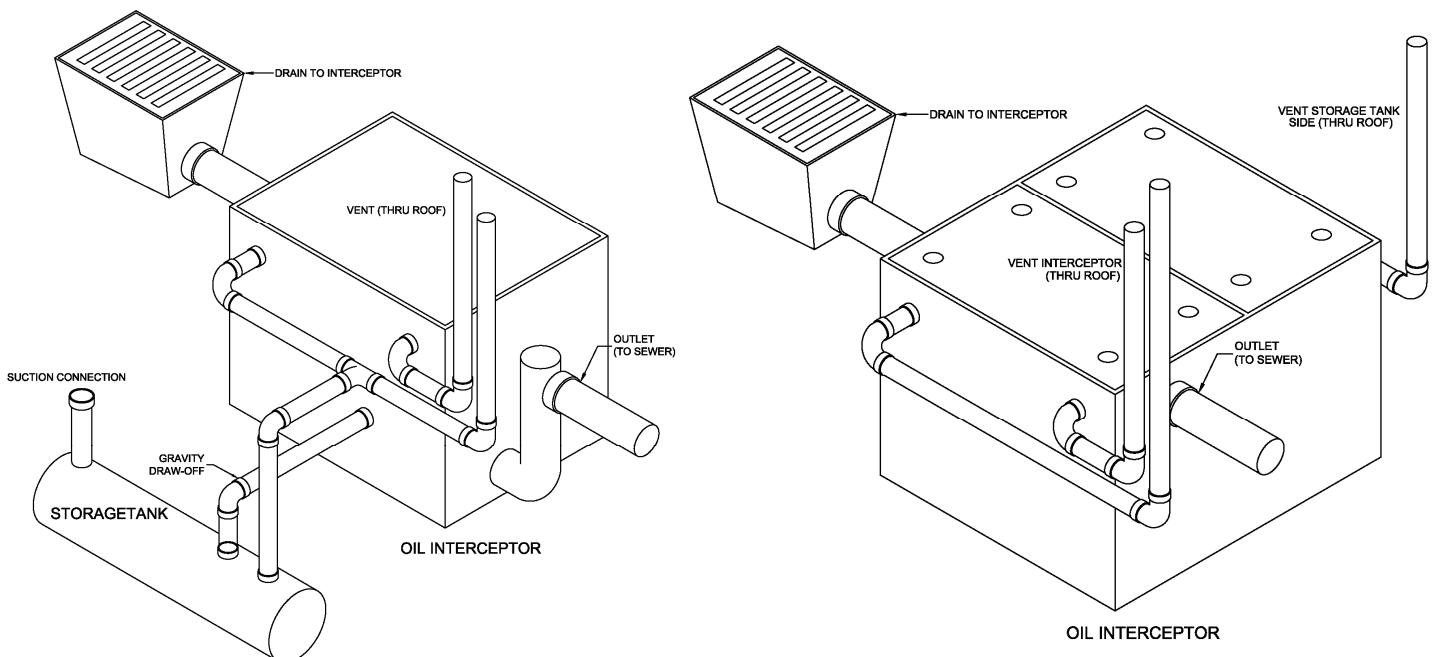
The orifice openings are related to the size and gallons per minute rating of the oil interceptor. It should also be noted that standard orifice sizing is for gravity flow conditions where no pressure build-up is considered. If an interceptor is operating at maximum flow levels, a head may develop, in which case overload conditions may still exist.

## VENTING

Oil interceptors must have a vented waste, sized in accordance with code requirements for venting traps, to retain a water seal and to prevent siphoning.

All Wade oil interceptors are furnished with IPS threaded vent and draw-off connections on both the right and left hand sides of the interceptor with plugs in one side. If necessary, the vent and draw-off connections can be changed from one side to the other at the time of installation, by switching the plugs.

The vent connections are located above the adjustable gravity oil draw-off standpipe in the intercepting chamber. Thus, the volatile gases rising from the intercepted substances are carried from the interceptor to the atmosphere.

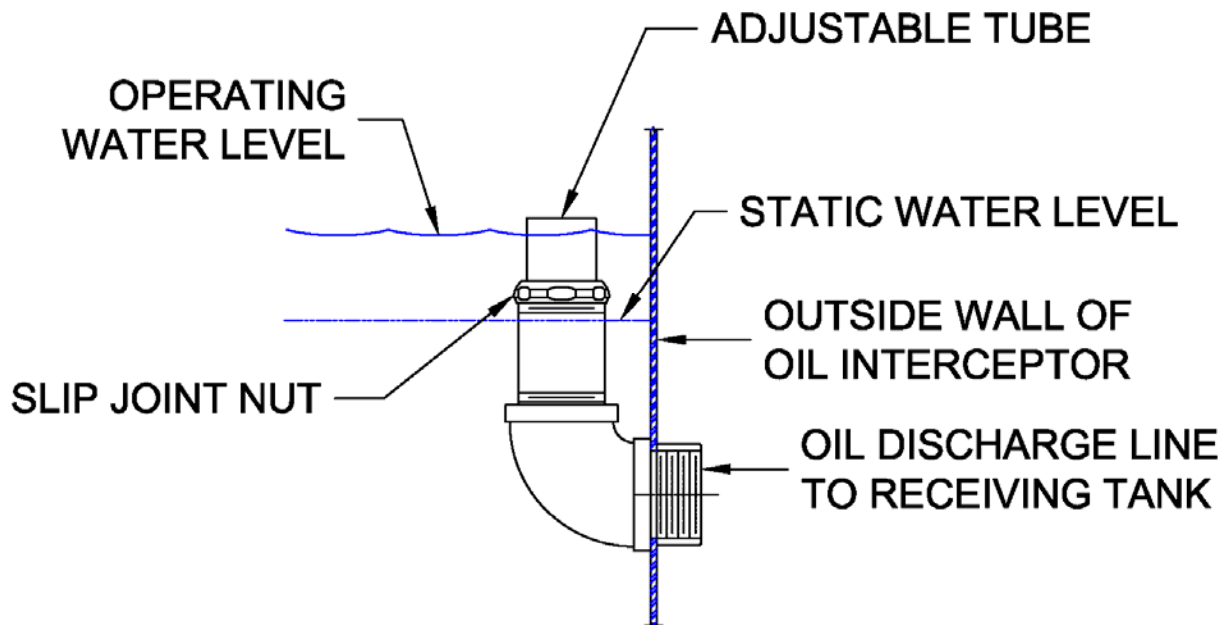


**ADJUSTABLE DRAW-OFF**

Wade oil interceptors are furnished with a IPS adjustable oil draw-off assembly. This draw-off can be furnished on either the right or left hand side of the interceptor. The oil draw-off consists of an adjustable pipe combination on the inside of the intercepting chamber, and a pipe connection from the internal adjustable standpipe on the side of the oil interceptor body to connect to an oil drain line from the oil interceptor to an oil storage tank. The adjustable standpipe can be raised or lowered inside the interceptor chamber to the proper height for draining off the separated oils and similar light density substances that have separated and floated to the surface of the interceptor chamber.

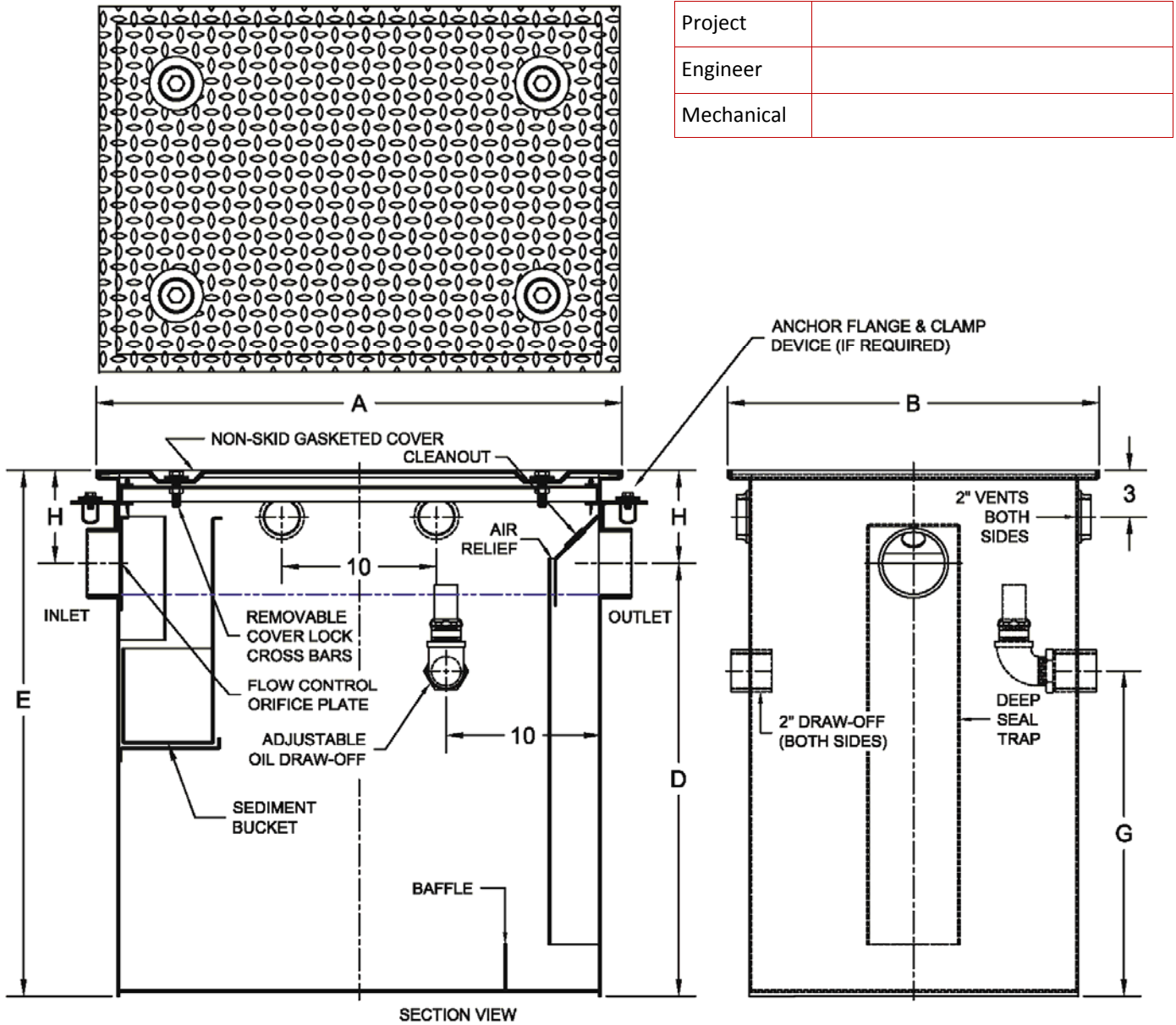
Thus, after the oils and other substances have been accumulated in the interceptor, they can be drained from the interceptor chamber by gravity flow through the internal standpipe. The standpipe is adjusted so that the opening is located at 1/8"

above the top of the water flow level in the interceptor chamber. There is no need to manually skim or dip out the oil, since the oil will drain off by gravity flow through the adjustable draw-off standpipe after it has been properly adjusted and tightened.



## 5400 Oil Interceptor

Regularly Furnished: Fabricated A.R.C. steel oil interceptor with removable baffles, & gasketed cover.



•	Size GPM	Pipe Size	Capacity		Dimensions (Inches)					No. of Lids
			Gallons	Cu.Ft	A	B	D	E	H	
	10	2	10	1.3	21	15 1/2	9 1/2	13	3 1/2	1
	15	2	14	1.9	34	15 1/2	11 1/2	15	3 1/2	1
	20	3	17	2.2	24	15 1/2	14	17 1/2	3 1/2	1
	25	3	56	7.5	28	22	26	32	6	1
	35	3	76	10.2	34	24	26	32	6	1
	50	3	82	11.0	34	24	28	34	6	1

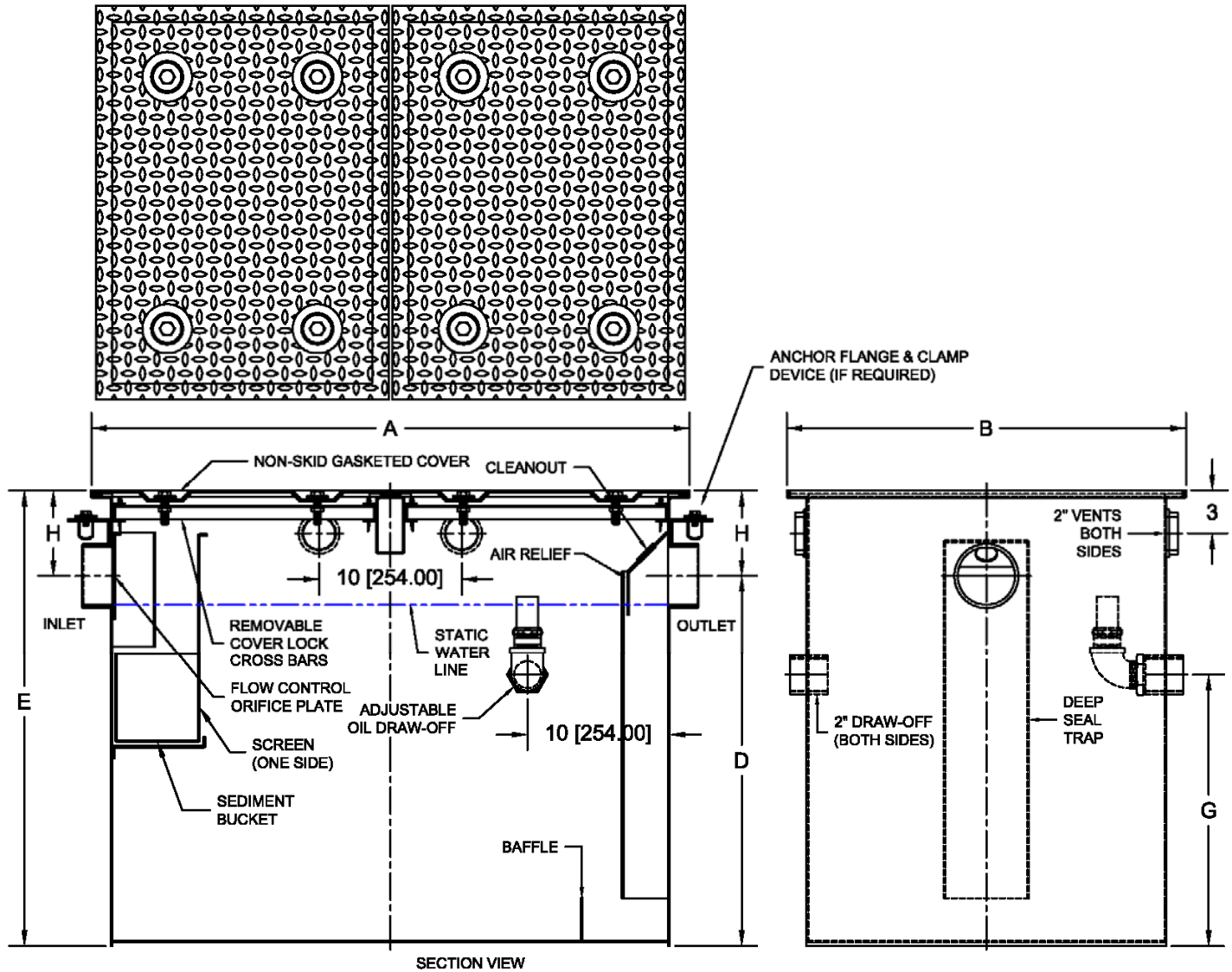
\*Dimensions vary from illustration

Suffix Options		
Suffix	Description	•
-18	Heavy Duty Cover *	
-24	Anchor Flange*	
-26	Anchor Flange w/ Clamp Device *	
-FH	Housing w/ Adjustable Cradle *	
-FHT	Full Housing w/ Adjustable Housing *	
-T	Cover Recessed for Tile (Specify Thickness) *	
-XT	Fixed Extension (Specify Height) *	
Outlet Variations		
-NH	No-Hub	
-IPS	Female Threaded	

## 5401 Large Capacity Oil Interceptor

Regularly Furnished: Fabricated A.R.C. steel oil interceptor with removable baffles, & gasketed cover.

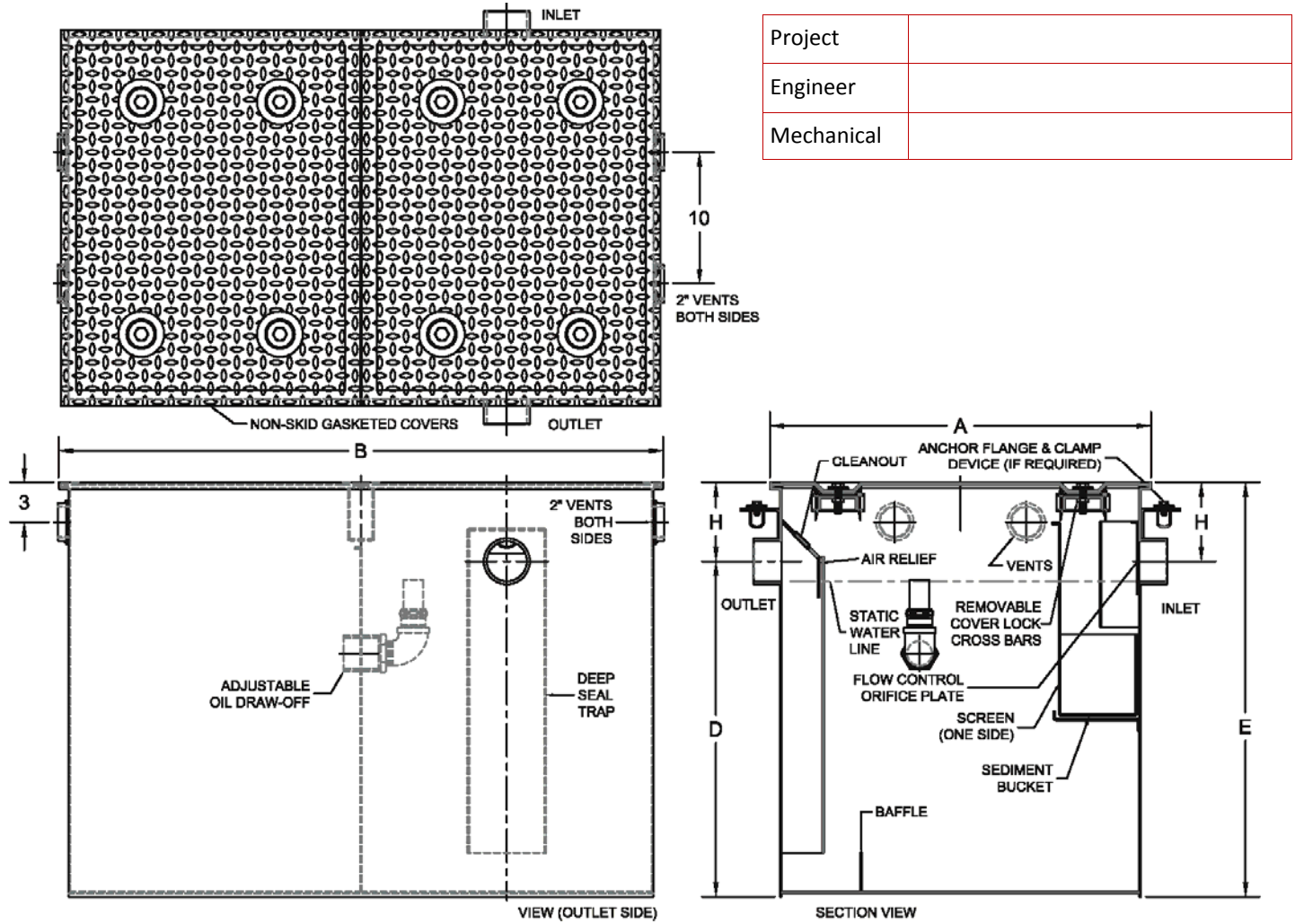
Project	Engineer	Mechanical
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•	Size GPM	Pipe Size	Capacity		Dimensions (Inches)					No. of Lids
			Gallons	Cu.Ft	A	B	D	E	H	
	75	4"	168	22.4	48	34	28	36	8	2
	100	4"	188	25.1	51	36	28	36	8	2
	125	4"	195	26.1	53	36	28	36	8	2
	150	4"	215	28.7	58	36	28	38	10	3
	200	4"	309	41.3	68	38	32	42	10	4
	250	4"	427	67.0	74	40	38	50	12	4
	300	4"	526	70.2	78	44	40	52	12	4
	350	6"	590	73.5	80	46	40	52	12	6
	400	6"	622	83.1	82	48	42	54	12	6
	450	6"	665	88.8	84	50	42	54	12	6
	500	6"	783	104.5	86	62	46	58	12	6

Suffix Options		
Suffix	Description	•
-18	Heavy Duty Cover *	
-24	Anchor Flange*	
-26	Anchor Flange w/ Clamp Device *	
-T	Cover Recessed for Tile (Specify Thickness) *	
-XT	Fixed Extension (Specify Height) *	
Outlet Variations		
-NH	No-Hub	
-IPS	Female Threaded	

\*Dimensions vary from illustration

**5500 Oil Interceptor with Integral Storage Compartment**


Project	
Engineer	
Mechanical	

Size GPM	Interceptor Capacity		Holding Tank Capacity		Dimensions (Inches)					No. of Lids
	Gallons	Cu.Ft	Gallons	Cu.Ft	A	B	D	E	H	
10	10.6	1.4	8.9	1.2	24	26	9	13	4	1
15	15.0	2.0	12.3	1.6	26	26 1/2	11	15	4	1
20	18.0	2.4	14.3	1.9	26	26 1/2	13 1/2	17 1/2	4	1
25	63.1	8.4	65.0	8.7	29	46	25 1/2	30	4 1/2	2
35	100.2	13.4	61.0	8.2	37	44 1/2	26	31	5	4
50	163.0	21.9	117.0	15.5	43	65 1/2	26	32	6	4

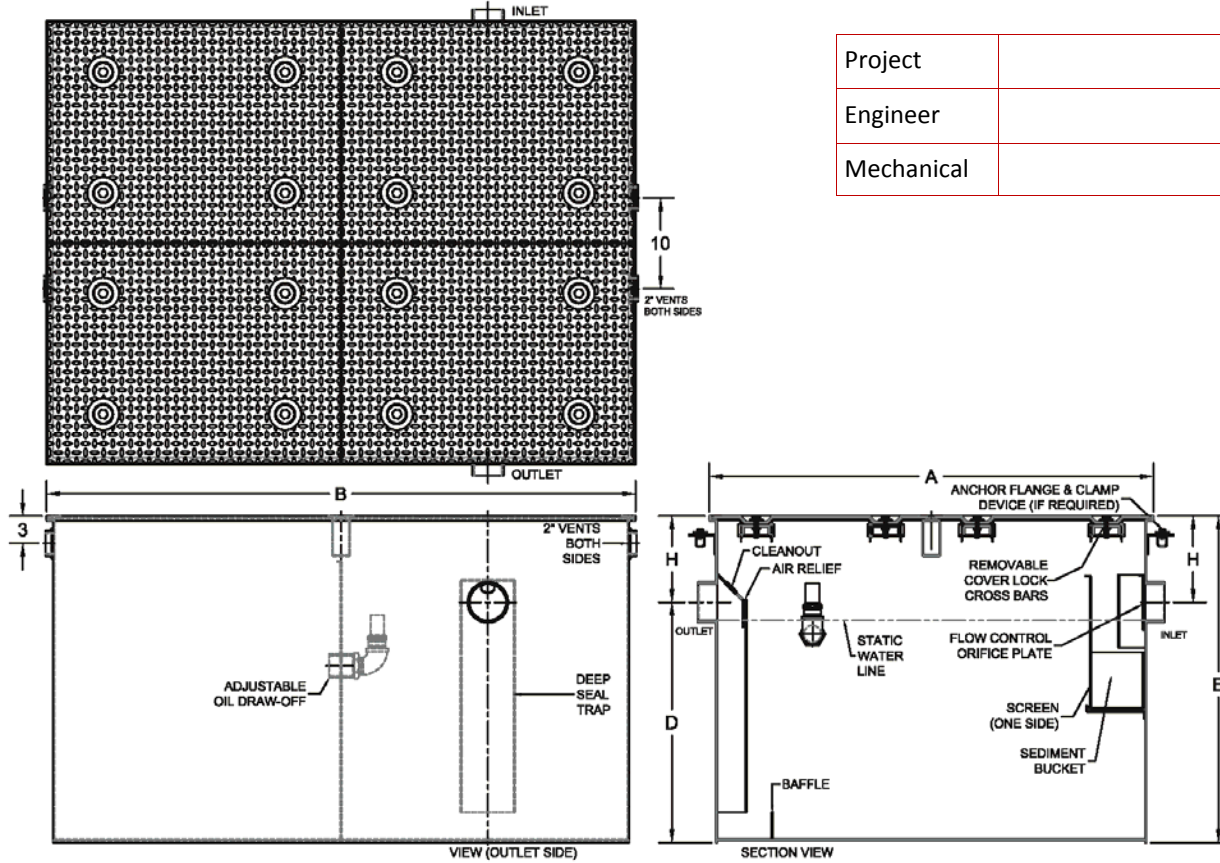
**Regularly Furnished:** Fabricated A.R.C. steel oil interceptor with integral storage compartment, removable baffles, & gasketed cover.

Size / GPM	Inlet / Outlet	•
10	2IPS/2NH	
15		
20		
25	3IPS/3NH	
35		
50		

Suffix Options		
Suffix	Description	•
-18	Heavy Duty Cover *	
-24	Anchor Flange*	
-26	Anchor Flange w/ Clamp Device *	
-AP	High Level Sensor w/ Audible Alarm	
-T	Cover Recessed for Tile (Specify Thickness) *	
-XT	Fixed Extension (Specify Height) *	
Outlet Variations		
-NH	No-Hub	
-IPS	Female Threaded	

\*Dimensions vary from illustration

## 5501 Large Capacity Oil Interceptor with Integral Storage Compartment



Project	
Engineer	
Mechanical	

Size	Pipe Size	Interceptor Capacity		Holding Tank Capacity		Dimensions (Inches)					No. of Lids
		Gallons	Cu.Ft	Gallons	Cu.Ft	A	B	D	E	H	
75	4"	202	27.0	122	16.3	49	65	26 1/2	36	9 1/2	4
100	4"	303	40.5	238	31.8	58	90	26 1/2	36	9 1/2	4
125	4"	344	46.0	269	36.0	62	90	28	40	12	9
150	4"	357	47.7	233	31.1	66	76	30	44	14	9
200	4"	453	60.5	347	46.4	73	90	30 1/2	48	17 1/2	9
250	4"	589	78.7	348	46.7	73	90	35 1/2	51	15 1/2	9
300	4"	815	108.9	345	46.2	95	86	36 1/2	52	15 1/2	9
350	6"	1066	142.5	569	76.0	101	94	43 1/2	60	16 1/2	9
400	6"	1109	148.3	562	75.2	108	91	43	60	17	9
450	6"	1113	148.8	566	75.7	119	83	43	60	17	9
500	6"	1240	165.8	559	74.8	119	83	46	66	20	9

**Regularly Furnished:** Fabricated A.R.C. steel oil interceptor with integral storage compartment, removable baffles, & gasketed cover.

Size / GPM	Inlet / Outlet	•
75	4IPS/4NH	
100		
125		
150		
200		
250		
300	6IPS/6NH	
350		
400		
450		
500		

Suffix Options		
Suffix	Description	•
-18	Heavy Duty Cover *	
-24	Anchor Flange*	
-26	Anchor Flange w/ Clamp Device *	
-AP	High Level Sensor w/ Audible Alarm	
-T	Cover Recessed for Tile (Specify Thickness) *	
-XT	Fixed Extension (Specify Height) *	
Outlet Variations		
-NH	No-Hub	
-IPS	Female Threaded	

\*Dimensions vary from illustration