Model MOI-450 Manual Oil Interceptor with Side Oil Compartment

# Guideline Specification

Provide and install \_\_\_\_\_ Highland Tank Model MOI-450 Manual Oil Interceptor(s).

Interceptor shall be of welded carbon steel construction. Internal and external surfaces shall receive a commercial grit blast and be coated with heavy-duty polyurethane for corrosion resistance.

Interceptor shall be rated at 0-450 GPM intermittent flow.

Dimensions shall be 6’10” long, 4’0” wide X 4’6” high. Static liquid holding capacity shall be 664 gallons (88.8 ft3) to comply with the code requirements of the facility. Interceptor shall have a 33.5” wide integral side oil compartment with oil storage volume of 500 gallons. An interceptor of smaller volume is not permissible.

# Application

The interceptor shall be designed to trap sediment and retain free floating oil and grease (petroleum hydrocarbons and other volatile liquids) from wastewater discharged from industrial and maintenance area floor drains such as those found in aircraft and vehicle maintenance, storage, and washing facilities.

Unit shall have flat bottom design for floor mounting, flush-with floor, or recessed installations. Standard installation requires connection to the drain line between the sewer and the floor drain.

# Description

Interceptor shall be a rectangular with fully removable and gasketed, vapor-tight, skid-proof Deck Plate Cover (s), with quick release latches, to allow for easy access for inspection and maintenance.

The interceptor shall be a pre-packaged, pre-engineered, ready to install unit consisting of:

A 6” NPT Inlet connection.

A non-clogging stationary Under Flow Diffusion Baffle in the Inlet Chamber with discharge located below the normal liquid level. Under Flow Diffusion Baffle shall be angled and designed to:

• Reduce horizontal velocity and flow turbulence.

• Distribute the flow equally over the interceptors cross sectional area.

* Direct the flow in a serpentine path in order to enhance hydraulic characteristics and fully utilize all interceptor volume.
* Completely isolate all inlet turbulence from the oil separation/storage compartment to prevent re-suspension of separated oil.
* Promote the separation of settleable solids from wastewater.

A Sludge Baffle to contain settleable solids and sediment.

A Separation/Storage Chamber.

An “Indirect Flow Transfer Baffle” at the outlet end of the interceptor designed to prevent short-circuiting by transferring flow back into the interceptor and allowing treated wastewater to indirectly exit from the bottom sides of baffle only. The baffle acts as an internal deep trap seal, allowing for water discharge from the bottom of the Separation/Storage Chamber only.

A removable gasketed vapor-tight skid-proof Deck Plate Cover with Quick Release Latches to facilitate flush-with-floor installations and for reinforced for light or heavy pedestrian traffic.

Cover to allow for total access to interceptor for observation and maintenance.

A 6” NPT Outlet connection.

2" NPT Fittings for Vent and Waste Oil Draw-off.

# Quality Assurance

Submittals:

• Shop Drawings: shop drawings for Manual Oil Interceptor(s) shall show principal

dimensions and location of all fittings.

• Instructions: provide three complete sets of installation, operation, and maintenance

instructions with interceptor.

Warranty: The manufacturer shall warrant its products to be free from defects in material and workmanship for a period of one year from the date of shipment. The warranty shall be limited to repair or replacement of the defective part(s).

# Options

• Double wall construction with electronic leak detection

• Integral side waste oil storage compartment

• Oil draw-off skimmer

• Removable solids screen basket

• Interceptor extensions

• Type 304 L stainless steel with 2-B finish.

All joints and seams shall be TIG (tungsten inert gas) welded

• Exterior stainless steel polished to a #4 finish

• Quick opening covers or hatch door

# Approved Manufacturer

The Manual Oil Interceptor shall be manufactured by:

Highland Tank

One Highland Road

Stoystown, PA 15563

814.893.5701

Fax: 814.893.6126

[staff@highlandtank.com](mailto:staff@highlandtank.com)

http://www.highlandtank.com