New England Approved

Model MOI-50 Manual Oil Interceptor

# Guideline Specification

Provide and install \_\_\_\_\_ Highland Tank Model MOI-50 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 0-50 GPM intermittent flow.

Dimensions shall be 2’8” long, X 1’10” wide X 2’10” high. Static liquid holding capacity shall be 80 gallons (10.8 ft3) to comply with the code requirements of the facility. An interceptor of smaller volume is not permissible.

# Application

Highland’s Interceptors are designed to trap sediment and retain free floating oil and grease (petroleum hydrocarbons and other volatile liquids) in wastewater discharged from hydraulic elevator pit sumps.

The standard unit shall be a flat bottom design with channels for above-floor installation. Optional elevated legs or flush-in-floor units are also available. Standard installation requires connection to the drain line between the sewer and the elevator sump.

# 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 3” 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 interceptor’s cross-sectional area.
* Direct the flow in a serpentine path 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

• High oil alarm electronic detection system

• Influent pumping system with control package

• Effluent pumping system with control package

• 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

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