



FLOATING ROOF TOP OIL SKIMMER OPERATION MANUAL

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CUSTOMER DETAILS

- 1. Company Name : M/s Indian Oil Corporation Limited
- 2. Address : 424+Q2H, Haldia, West Bengal 721605
- 3. Product Ordered : Floating Roof Top Oil Skimmer
- 4. Po Number & Date : RHM21R1048/27228746 & 17.09.2021





INDEX

ContentPages1. Introduction.42. Technical Description.52.1 Funnel with frame.52.2 Support frame.52.3 Oil transfer Hose.52.4 Inlet & Outlet flanges.63. Part Description.64. Installation Procedure.75. Working.7

VENS HYDROLUFT FILTRATION SEPARATION



1. Introduction

Vens Hydroluft Pvt Ltd offers, Floating Roof top Oil Skimmer to remove Floating Oil on water surfaces from closed Indoor/Outdoor tanks which are used in oil refineries, process industries etc. Methods of converting them to sludges or absorbing them with special media or booms results in high costs, disposal & maintenance problems.

VH takes the lead by offering Floating Roof top Oil Skimmers which are Ideally suited for large removal of Floating Oil in

- Closed Large Effluent Tanks in Process/
- **Chemical Industry**
- Edible Oil Collection Tanks
- Oil Cargo Ports
- Crude Oil Production units etc

The device is equipped with welded supports and funnel height adjustments. Slings are provided to hold the oil collection hose on various locations from the roof top

Technical Advantages

- · No power input required for operating
- Easy to assemble and dismantle
- Innovatively designed to move along with roof for effective oil removal
- Spiral expanding and spiral closure of oil collection hose which assists effective oil removal from the liquid medium







2. Technical Description

2.1 Funnel with frame

Oil floating on the liquid medium will enter the system through the funnel. Perforated sheet is fixed on funnel to filter heavy particles entering the system

MOC	SS 304
Inlet hole size	1" x 12 Nos.
Opening size	10"
Delivery size	3"
Outlet pipe size	3" NB
Operating temp	90 degC



Fig: 2.1

2.2 Support frame

Support frame is provided to join the skimmer with roof of tank. Holes are provided on support frame to adjust the height of the funnel.

MOC **Operating temp** SS 304 90 degC







Fig: 2.2

2.3 Oil transfer hose

Braided hoses shall be connected with inlet and outlet flanges on top and bottom. It is used to transfer the hose to the bottom of tank. Hoses are installed spirally to assist free flow of oil to the bottom of the tank. Support slings are used to hold the braided hose in a spiral way by connecting it with roof.

MOC of Hose	SS 304
Hose length	25 mtr
Туре	Braided
MOC of Sling	SS 304
Operating temp	90 degC
Operating Pressure	10 bars





2.4 Inlet & Outlet flanges

Inlet flange is used to connect the braided hose to funnel with frame. Outlet flange is used to connect the braided hose with oil outlet pipe of tank

MOC	SS 304
Operating temp	90 degC





Fig: 2.4.1

Fig: 2.4.2

3. Part Description







- 1. Funnel
- 2. Perforated sheet
- 3. Outlet pipe
- 4. Funnel adjustment plate
- 5. Support plate
- 6. End flange

- Fig: 3.1.2
- 7. Inlet flange
- 8. SS braided hose
- 9. Crimping nut
- 10. Support slings
- 11. Support plate for slings
- 12. Outlet flange



4. Installation Procedure

- Step 1 : Join the support plate (part 5) with roof of the tank
- **Step 2 :** Join funnel with frame to the support plate (*part 5*) by matching the holes in funnel adjustment plate (*part 4*) with holes in the support plate
- Step 3 : Connect the inlet flange (part 7) with end flange (part 6) of outlet pipe
- Step 4 : Connect one end of SS braided hose (part 8) to the inlet flange
- **Step 5 :** Hose shall be rotated spirally and brought it to the bottom of the tank.
- Step 6 : Connect other end of the hose to bottom flange (*part 12*) which shall be connected to the oil outlet pipe of tank

5. Working

Oil flows by gravity through the holes of the perforated sheet into the funnel and through the SS hose. The collected oil is sent to the bottom of the tank to be drained thereafter - which can be collected in the outside tank for further disposal.

Important Note

The above provided specifications may vary according to site conditions. Please contact Vens Hydroluft's Engineers for further clarifications.