

Standard Operating Procedure

Skimmer – Versatech Multi-head



Equipment Description

Oleophilic skimmer with interchangeable brush, disc and drum elements and an integrated positive displacement lobe pump driven by a separate self-contained diesel hydraulic power pack. The choice of skimmer elements and the inbuilt pump mean that this skimmer can be used for the whole range of oil viscosities, from light through to HFO.

Technical Specification

	<u>Length</u>	<u>Width</u>	<u>Height</u>	<u>Mass</u>
Skimmer Head	2000mm	1350mm	750mm	180kg
Power Pack	1550mm	760mm	1270mm	600kg
Hydraulic fittings:	Aeroquip QRC			
Power type:	Diesel/Hydraulic			
Discharge / hour:	45 m ³ /hr			

Health and Safety



To safely operate this equipment 2 people are required.

Safe Operating Requirements

- Ensure adequate PPE is worn – as detailed below,
- All personnel are to be trained in the use of Versatech Multiheaded Skimmer, or under the close supervision of a trained operator
- If required a Job Safety Analysis (JSA) to be conducted prior to work commencing. Identification of the following safety factors are critical, but not limited to:
 - Manual Handling,
 - Slips/Trips/Falls,
 - Contamination/Decontamination.
- Ensure adequate Personal Protective Equipment (PPE) is worn –
 - * Life jackets must be worn on or near water dependant on operation

- A communication plan must be decided upon to ensure clear and concise communication at all times
- Be aware of pinch points and 'the bight' between vessels during deployment.
- A full safety brief must be conducted.
- All incidents, accidents and near misses must be reported as per company policy.

Operational Instructions

Emergency shutdown

In the event that an emergency shutdown is required, the following measures should be taken:

- Shut down power pack immediately when safe to do so.
- Return the hydraulic flow control to "off" position.
- Close any isolation valves.
- Communicate according to the designated communications plan.

Pre-start checks

- Ensure that all fluid levels are checked on the power pack.
- Check the hydraulic hoses and discharge hoses for damage or wear.
- Visually inspect the skimmer for damage or wear.
- Visually inspect all lifting equipment and check that it is test date and in good condition.

Assembly

- Assemble the skimmer using either brushes, discs or drums depending on oil viscosity and weathering.
- Ensure that the hydraulic controls are in the "off/neutral" position and that the hydraulic flow controls are at the lowest setting.
- Lay out the hydraulic hoses and connect them to the power pack and the skimmer, using a sorbent pad to catch any spilt hydraulic fluid.
- Ensure the locking rings on the hydraulic fittings are locked in place.

Note - Failure to correctly connect all hoses may result in failure and extensive damage to the pump unit.

- Connect the discharge hose to the skimmer. Ensure the other end of the discharge hose will reach the waste storage, and attach/connect.
- Attach hose floats to all hydraulic and discharge hoses.

Final check – pre-deployment

- Prior to starting the engine, a final inspection of all assembled items needs to be carried out.
- Ensure that the engine stop control is in the "run" position and start the engine.
- Pour a few litres of water into the skimmer sump to lubricate the pump
- Set the engine throttle at a fast idle and check the operation of all hydraulic functions.
- Stop the engine.

Caution

- Do not run the skimmer pump dry as this can cause extensive damage.

Operation

- Attach the lifting equipment to the skimmer.
- Lower the skimmer into the water using a suitable crane.

Note – Take care to ensure the hydraulic and discharge hoses don't get entangled during this process

- Ensure the hydraulic and discharge hoses are secured appropriately.
- Ensure the open end of the discharge hose is placed into or attached to the waste storage facility.

- Once the skimmer has been deployed, start the engine and proceed with the operation.
- Using the hydraulic controls, start by running the brushes/discs/drums to fill the sump with oil.
- Start the discharge pump and run it at a suitable speed.
- Run the brushes at a low speed, increasing the speed whilst observing to the point of highest efficiency.
- Adjust pump and brush speed as required.
- Once completed, stop the power pack, setting all controls to “stop/neutral” and pump the remaining fluid from discharge hoses. Note that hoses will still retain levels of fluid.
- Remove the skimmer from the water, minimising any secondary contamination.

Caution If the skimmer has been contaminated with oil, care must be exercised when retrieving it to avoid causing secondary contamination. Ground sheet/Sorbent boom/bunded area should be used to mitigate this. If the skimmer is contaminated with oil, roll it onto a ground sheet, seal it and take it to a bunded cleaning station to be washed.

Post operation – Contaminated skimmer

- Establish a bunded cleaning station.
- Place the skimmer in the bunded cleaning station.
- Release all hydraulic pressure prior to the disconnection of the hydraulic hoses by manually moving the hydraulic levers.
- Disconnect hydraulic hose connections and fit dust covers. Ensure that spilt hydraulic fluid is captured.
- Drain all discharge hoses, flushing through to remove residual oil.
- Clean the skimmer with hot water. **DO NOT** use detergent on brush surfaces, this will reduce the recovery efficiency of oil on the brush surface. If required, diesel fuel can be used to assist with the cleaning of the skimmer.
- The skimmer is to be dry prior to maintenance inspection, re-stowage and storage
- Ensure the skimmer is returned to response ready condition.

Note - Maintenance of the skimmer is to be performed as listed below.

Post operation – Uncontaminated skimmer

- Release all hydraulic pressure prior to the disconnection of the hydraulic hoses by manually moving the hydraulic levers.
- Disconnect hydraulic hose connections and fit dust covers. Ensure that spilt hydraulic fluid is captured.
- The skimmer should be laid out, washed and flushed with fresh water. **DO NOT** use detergent on brush surfaces, this will reduce the recovery efficiency of oil on the brush surface. If required, diesel fuel can be used to assist with the cleaning of the skimmer.
- Drain all discharge hoses and flush through with fresh water.
- The skimmer is to be dry prior to maintenance inspection, re-stowage and storage.
- Ensure the skimmer is returned to response ready condition.

Note - Maintenance of the skimmer is to be performed as listed below.

Additional Information

Maintenance

- All maintenance and repairs are to be completed in accordance with either the manufacturer or AMOSC procedures.
- All equipment must be left in an operational condition when not in use.
- All defects must be repaired or the equipment is to be “tagged out” for maintenance and repair.

Related Documents

AMOSC HSSE Plan

PN08 - HSSE Policy

AMOSC JSA Template

PN 11 AMOSC Vehicle Use Policy (AMOSC Vehicle Checklist / AMOSC Load Assessment Checklist)

SOP 1001 Ops; Forklift Operations

SOP 1002 Ops; Loading and Securing of Cargo

SOP 1003 Ops; Transporting Equipment To/From Warehouse

SOP 2006 Eq; Waste Storage Fastank

SOP 2006-1 Eq; Waste Storage IBC

