

Standard Operating Procedure

SKIMMER - KOMARA DISC 30K



Equipment Description

The Komara 30 skimmer system is a self-contained, versatile oil recovery system, comprising an oleophilic disc skimmer, diesel power pack, transfer pump and all the associated hoses and connectors. The system will operate in most environments and will recover a wide range of oils at more than 30m³/hr, with more than 98% oil pick-up.

The system can be used in ports and harbours, shoreline operations, coastal waters, offshore and almost any similar environment where oils are required to be removed from a water source.

The four independently driven banks of discs create a 360 degree 'flow' of pollutant towards the skimmer head.

The disc scrapers are manufactured from a specially designed flexible polymer, which precisely follows the contour of the disc and ensures that even the lightest oils are recovered with high efficiency.

The remote Vikopump V1128W is a powerful positive displacement transfer pump with excellent suction performance, enabling high volumes of high viscosity contaminants to be recovered and discharged. The pump will run dry without damage. The pump rating is 60m³/hr and the system oil recovery rate is more than 30m³/hr.

Technical Specification

Skimmer Weight:	120kg	Hydraulic pressure:	2100psi
Power Pack Weight:	250kg	Capacity / hour:	30m ³
Suction connection:	4 inch	Power type:	Hydraulic
Hydraulic fittings:	Tema female/male		
Hydraulic flow:	<25 lpm		

Health and Safety



To safely operate this equipment 2- 4 people are required.

Note: The above listed Personal Protective Equipment (PPE) is to be used as a guide. A life jacket may or may not be required, dependent on the deployment platform.

Safe Operating Requirements

- All personnel are to be trained in the use of the Komara 30K, or under the close supervision of a trained operator
 - 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, Vehicle/Vessel Movements, Pinch Points and Personnel Contamination/Decontamination.
 - Ensure adequate Personal Protective Equipment (PPE) is worn – as detailed above. * Life jackets must be worn near water
 - A communication plan must be decided upon to ensure clear and concise communication at all times
 - All incidents, accidents and near misses must be reported as per AMOSC company policy.
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Operational instructions

Emergency shutdown

Locate Emergency Stop, Engine Stop before starting the Power Pack.

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

- Shut down power pack immediately where safe to do so.
- Return the hydraulic flow control to the “off” position.

Pre-start checks

- Ensure that fuel and oil levels are checked on the power pack.
- Check hydraulic hoses for damage or wear.
- Visually inspect the skimmer and accessories for damage or wear.
- If applicable, ensure that all lifting equipment is in date and in good condition.
- Lay out hydraulic hoses and connect the power pack to the skimmer ensuring that any spilt hydraulic fluid is captured.
- 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 suction hose between the skimmer and pump.
- Connect the discharge hose between the pump and waste storage.
- Attach floats to the suction hose near the skimmer to support the hose in the water.
- Ensure that the hydraulic flow control is in the “off” position.
- Ensure that the engine stop control is in the run position and start the engine.
- Check the operation of the disks.
- Stop the engine.

Operation

- When the skimmer has been deployed, start the engine.
- Start the discs rotating; set the hydraulic flow control to “on”
- The speed of disc rotation is set after observing the skimmer and adjusting according to oil/water behaviour on the discs.
Excessive disc rotation speed will reduce oil recovery efficiency by collecting water.
- Once the operation is complete, stop the power pack and set the hydraulic flow control to the “off” position.
- Remove the skimmer from the water, minimising any secondary contamination.

Caution

- If the skimmer and accessories are contaminated with oil, care must be exercised when retrieving the skimmer to avoid causing secondary contamination. Ground sheet/Sorbent boom/bunded area should be used to mitigate this.
- Drain all suction and discharge hoses, flushing through to remove remaining contamination.
- Disconnect hydraulic hose connections and fit dust covers. Ensure that spilt hydraulic fluid is captured.

Caution

- If the skimmer and accessories are contaminated with oil, place them onto a ground sheet, seal and take it to a bunded cleaning station to be washed.

Post operation – Contaminated skimmer

- Establish a bunded cleaning station.
- Clean skimmer and accessories with hot water. **DO NOT** use detergents on disc surfaces, as they reduce the recovery efficiency. If required, diesel fuel can be used to assist with the cleaning of the skimmer and accessories.
- The skimmer and accessories are to be dry prior to maintenance inspection, re-stowage and storage
- Ensure all equipment is returned to response ready condition.

Note - Maintenance of the skimmer and accessories are to be performed as listed below.

Post operation – Uncontaminated skimmer

- The skimmer and accessories should be laid out and washed with fresh water.
- The skimmer and accessories are to be dry prior to maintenance inspection, re-stowage and storage

Note - Maintenance of the skimmer and accessories are 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

Ref no: SOP 2004-1
Author: MDW
Date of Issue: 09/16
Reviewer: DJ
Date Reviewed 06/20
Approver: NQ



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

