

Standard Operating Procedure

SHORE SEALING BOOM



Equipment Description

Shore sealing boom is a triple tube design boom is designed for in-shore and near-shore operations. The two lower tubes are water filled while the upper tube is air inflated. It is designed for use at the water's edge as a seal between land and water.

Technical Specification

Weight: 80kg per length

Length: 20-25m

Connection type: ASTM

Health and Safety



To safely operate this equipment a minimum of 2-4 people are required

Safe Operating Requirements

- Ensure adequate PPE is worn – as detailed above,
- All personnel are to be trained 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:
 - o Manual Handling,
 - o Slips/Trips/Falls,
 - o Contamination/Decontamination.
- Ensure adequate Personal Protective Equipment (PPE) is worn –
 - o * 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 the boom/ vessel during deployment.
- A full safety brief must be conducted.
- All incidents, accidents and near misses must be reported as per AMOSC company policy.

Operational Instructions

Pre-use checks

- Test the communication plan for shoreline to vessel communications
- For AMOSC Response purposes, ensure an operational plan is completed to ensure correct strategy
- Pre-start checks to be conducted on water pump and blower. As detailed in SOP Backpack Blowers (see Picture 1 below) and Small Water Pumps (see Picture 2 below).



Picture 1



Picture 2

Operation

Preparation for Deployment of Boom

- Prepare the blowers and water pumps for use.
- Determine the amount of boom to be deployed and unpack the appropriate number of lengths.
- Ensure all lengths of boom are in an operational condition.
- Join the lengths together, ensuring that the ASTM connectors are correctly connected and secured with the retaining pins.
- Attach a towing bridle to each end of the boom. Ensure that a tow line and anchor are attached to the bridle of the seaward end.
- Securely anchor the boom in the desired location on the beach using a shoreline anchoring kit (see Picture 3 below).
- Inflate the buoyancy chambers via the air valve located on the single top tube. Make sure the air valve on the opposite end of the boom is closed and the dust cap fitted.

Caution The attachment points for anchor lines are at the waterline on the boom connectors. Do not attach anchor lines to the handholds or ballast chain.



Picture 3

Deployment of Boom

- Using the tow line, tow the boom into the water using the towing vessel.
- Tow the boom to a suitable position and anchor in the desired configuration.
- When certain that the boom is in the desired location the ballast chambers can be filled with water, using the water pump.

Note – When fully ballasted, each 20-metre length of shore sealing boom has a mass in excess of 1800kg. The boom cannot be moved when ballasted.

Retrieval of Boom

- To recover, open all the ballast chambers and allow the water to drain.

Note - This can be assisted by using a back-pack blower to expel the water.

- To facilitate recovery of the boom, vessel crew are to recover the anchor using the tripping line.
- As the water drains the boom can be moved up the slope of the beach or boat ramp to ensure that all the water is drained out.
- Once the boom is ashore, open all valves on the buoyancy chambers and deflate the boom.

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

Post operation – Contaminated boom

- Establish a bunded cleaning station.
- Place the boom in the bunded cleaning station and wash with detergent and fresh water as required.
- Boom to be dry prior to maintenance inspection, re-stowage and storage

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

Post operation – Uncontaminated boom

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

Note - Maintenance of the boom 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 Small Water pump
SOP Backpack Blower
AMOSC Deployment Guide – Operations (IMO 1) Beach Deployment
AMOSC Deployment Guide – Man_C2 (IMO 2_3) Beach Deployment