

OIL SPILL BOOM

General Specification

(27/04/2021)

1. General

- 1.1. This specification covers the general requirement for Heavy Duty Inflatable Oil Spill Boom for Ships for EAPC Co. Boom shall be deployed 365 days a year at sea (Red sea).

2. General Requirements

- 2.1. The Boom shall be used for offshore operations and for permanent installations at oil terminal around ships (tankers).
- 2.2. The Boom shall be made from the best robust and durable materials available on the market.
- 2.3. Boom's fabric shall contain at least two (2) layers at each of the components (scrim and coating), each having best properties for its designation. Scrim to provide strength and Coating to protect the Scrim (UV light, abrasion, chemicals etc.). Material will be robust to the outer liquid surface environment and will have minimum seams (to reduce the possibility to fail).
- 2.4. The stiffeners, anchoring points, and ASTM fixing plates shall be vulcanized between the fabric layers of the boom to ensure a robust structure, in addition to easy cleaning and maintenance.
- 2.4.1. The ballast chain or weights shall be from hot-dip galvanized steel and shall be covered with flexible material (such as rubber tubes), to reduce boom wear.
- 2.4.2. The structure of the boom shall enable easy operation, cleaning and maintenance.
- 2.4.3. Inflation and deflation of Boom chambers shall be enabled by a single operator and the ventill shall be easy for inflation when pressure drops.
- 2.4.4. Every chamber shall have additional pressure relief valve for over inflation/pressure.

- 2.5. The Boom shall be assembled from separate sections parts with connectors, so each section can be extended \ shortened or replaced (if it will be damage).
- 2.5.1. Each section part shall have anchor point.
 - 2.5.2. The length of each section in the Boom shall be 30 meters max.
 - 2.5.3. Boom Height (deflated) shall be 1200 mm.
 - 2.5.4. Height above the water (freeboard): 400-500 mm.
 - 2.5.5. The sections shall be equipped with an international standard connection connector (aluminum / S.S rails) with a safety pin.
- 2.6. Buoyancy/weight ratio of the Boom shall be at least 8: 1.
- 2.7. The Boom shall have anchor points (ANCHOR EYEBOLTS) that allow connection to pillars and floats / sinkers. This shall be at least five (5) points on every joint each side of the boom. First set on the head ASTM connection (top and bottom), second on the middle of the segment (about 15 meters) and last set on the end ASTM connection (top and bottom). The anchor points shall be flat for good folding.
- 2.8. The Boom shall be deployed with the help of reels, power packs, hydraulic pipes and inflators. Supplier to supply a quote (as an option) to one (1) reel, for minimum of 300 meter Boom storage capacity, with hydraulic motor, operating panel and universal hydraulic connections (to be connected to E.A.P.C's power pack).
- 2.9. The Boom shall be towed in water by a vessel or by rope winch.
- 2.10. The Boom shall have high abrasion and puncture resistance and shall withstand long periods of exposure to sun, oil, fuel, high UV and more.
- 2.11. The Boom can be rolled for storage and shall be stored on reels. It will be possible to roll the Boom on a roller without damaging it.
- 2.12. The Boom shall have a certificate from an international classification company.
- 2.13. The Boom shall be supplied with basic maintenance and repair instructions and kits (in Hebrew).

- 2.14. Safety connection at the top of the boom shall be supplied for obstacle warning lights every 15 meters include solar water protection lights or light reflectors plate on the boom.
- 2.15. Towing sling for ASTM connection (total of four 4 units) with additional towing rope and for the boom WLL.

3. General Dimensions and environmental requirements:

- 3.1. Min overall height (deflated): 1200 mm.
- 3.2. Fabric tensile strength shall be min' of 18,000 N/5cm'
- 3.3. Operational temperature: - 10 to + 60 degree C (ambient temperature).
- 3.4. Total Boom length required 1,000 meters. Additional 500 meter shall be quoted as an option.
- 3.5. The Boom shall comply with Red sea conditions all year round.
- 3.6. The Boom shall have resistant to the following sea conditions:
- 3.6.1. Short waves up to 1.5 meters.
- 3.6.2. Current 2 knots.
- 3.6.3. Winds up to 30 knots

Offered Prices

Item	Quantity	Price per meter/Reel	Total Price
Inflatable Heavy Duty Oil Boom stored on Reels (according to T.S)	1,000 (m')		
Reel with Hydraulic motor & Operation panel	(min' 250 m' storage capacity – Quantity of Reels as required)		
Inflatable Heavy Duty Oil Boom stored on Reels (according to T.S) (EAPC Option)	500 (m')		
Reel with Hydraulic motor & Operation panel (EAPC Option)	(min' 250 m' storage capacity – Quantity of Reels as required)		

Bidder's name

Signature of authorized signatories