

COMBINED RECOVERY SYSTEM

RO-BOOM 2000 - RO-SKIM SYSTEM WITH 100M OPENING (DESMI)



GENERAL DESCRIPTION

The DESMI Ro-Boom 2000–Ro-Skim system is an integrated containment and recovery system consisting of an inflatable boom (Ro-Boom 2000) and a weir skimmer integrated in the boom system, to be used by two ships.

When sweeping, the oil will build up against the face of the Ro-Boom at the back of the U-Sweep formation. The Ro-Skim is placed at the back of the sweep where the oil is collected. By building the skimmer into the highly buoyant boom system the weir lip will closely follow the wave movement and thereby the surface of the collected oil. A rough grid placed in front of the hydraulically adjustable weir lip prevents larger pieces of debris from entering the funnel. Depending on the thickness of the collected oil, the height of the weir lip can be adjusted while skimming.

The Ro-Skim is fitted with the powerful DESMI DOP vertical screw pump. The high outlet pressure from the screw pump allows pumping of recovered oil over large distances. This is of high importance as it is in practice difficult to position an oil recovery tank near the skimmer.

MAIN COMPONENTS

The Ro-Boom 2000–Ro-Skim system is composed of the following main components:

- DESMI Ro-Boom 2000 (2 x 25 plus 5 x 50m) with hydraulic reels and tow set
- 1 x DESMI RO-SKIM 2000 weir skimmer with DESMI DOP 250 DUAL HS pump
- 1 x DESMI Remote control stand with air-blower
- 1 x DESMI ATEX II hydraulic power pack for RO-SKIM 1500
- 1 x set of spares and hoses (including reel)

KEY CHARACTERISTICS

The Ro-Boom 2000–Ro-Skim system ensures faster operation than conventional oil boom configurations due to its construction and integration of the skimmer module within the boom. This provides a significant advantage as it allows the system to achieve much higher towing speeds, of up to 3 knots. The key characteristics of the system are:

- Two vessel operation
- Certified to operate in Hazardous Area Zone II in accordance with the ATEX Directive (ATEX 94/9/EC) or similar
- Suitable for recovery of light to heavy crude oil

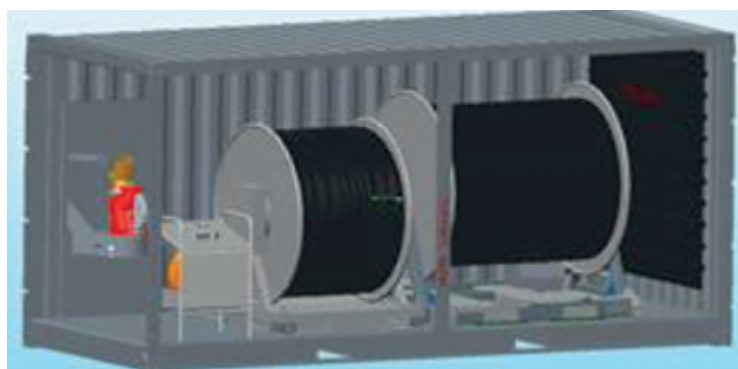
TECHNICAL SPECIFICATIONS

SYSTEM LENGTH	300 M (OVERALL BOOM LENGTH)
SWEEP OPENING	UP TO 120 M
FREEBOARD	0.6 M
DRAUGHT	1.09 M
FREEBOARD	0.8 TO 1.0 M
SWEEPING SPEED	UP TO 3 KNOTS
PUMPING CAPACITY	100 M ³ /H MAX
DISCHARGE PRESSURE	10 BAR MAX
PUMP VISCOSITY RANGE	0 - > 1 MILLION CST
WEIGHT	8 TON/20 FT CONTAINER



STORAGE & TRANSPORT

The Ro-Boom Ro-Skim system is fully containerised and is stored in two 20 ft ISO containers, together with all required ancillaries for an autonomous operation. The containers have double cargo doors in one end and double cargo doors on one side, being supplied in highly visible orange, RAL 2008. The containers are fitted with twist locks for securing reels and power packs. Furthermore, one container is equipped with a rack of coils for lines and hydraulic hoses, brackets etc.



OPERATIONS

The Ro-Boom 2000–Ro-Skim system is designed for rapid deployment and recovery directly from/in the two 20 ft containers in which it is delivered, by using a crew of three, as follows:

- One crew controlling the hydraulic control stand and keeping contact with the ship captain and the other two crew members
- Two crew members inflating/deflating the boom floatation chambers, assembling the skimmer with the boom end connectors and guiding the system over the reeling and deck during recovery/deployment

With a trained crew the system can be deployed or recovered in less than 30 minutes.

The space required for the deployment of the system is the footprint of the 20 ft container plus a 4-5 m clear space in front of the doors plus the footprint of the 20 ft container with the ancillaries plus a 3 m clear space in front of the doors, and there must be an open gunwale to deploy/recover the system into/from the water.