# COMBINED RECOVERY SYSTEM

# RO-BOOM 2000 - RO-SKIM SYSTEM (DESMI)





### **GENERAL DESCRIPTION**

The DESMI RoBoom 2000 – RoSkim system is an integrated containment and recovery system consisting of an inflatable boom (RoBoom 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 sweep formation where the RoSkim is placed. 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 RoSkim is fitted with the powerful DESMI DOP vertical screw pump. The high outlet pressure from the pump allows pumping of recovered oil over a distance of approx. 50-60 m.

## MAIN COMPONENTS

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

- 300m Ro-Boom 2000 (2x25m + 5x50m) with hydraulic reels and tow set
- 1 x RO-SKIM 2000 weir skimmer with DOP 250 DUAL HS pump
- 1x Umbilical 70m (20+50m) with reel
- 1 x Remote control stand with air-blower
- 1 x Diesel Hydraulic Power Pack 57kW ATEX II
- 1 x set of spares and hoses (including reel)
- 2 x 20ft ISO containers



## **KEY CHARACTERISTICS**

The RoBoom 2000 – RoSkim system allows for a sweeping speed between 0.5-0.8 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 medium to heavy crude oil.

### **TECHNICAL SPECIFICATIONS**

SYSTEM LENGTH	300 M (OVERALL BOOM LENGTH)	
SWEEP OPENING	UP TO 120 M	
FREEBOARD	0.6 M	
DRAUGHT	1.1 M	
SWEEPING SPEED	0.5-0.8 KNOTS	
PUMPING CAPACITY	100 M <sup>3</sup> /H MAX	
DISCHARGE PRESSURE	10 BAR MAX	
UMBILICAL	70 M (20M ON DECK + 50 M IN THE WATER)	
WEIGHT OF THE SYSTEM	20FT CONTAINER WITH 300M BOOM, APPROX. 8400KG	
	20FT CONTAINER WITH POWER PACK, UMBILI- CAL, WEIR SKIMMER, APPROX. 6500KG	



#### **STORAGE & TRANSPORT**

The Ro-Boom Ro-Skim system is fully containerised and is stored in two 20ft 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. 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.



NOTE: The equipment will be provided without lifting appliances.

### **OPERATION**

The RoBoom 2000 – RoSkim system is designed for rapid deployment and recovery by using a crew of minimum three. With a trained crew the system can be deployed or recovered in approx. 30 minutes.

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

The vessel suitable for single-vessel operation of the system must be directional stable (e.g. deep v-shaped keel) and/or with ability for sideways movements (i.e. side propeller/thruster). This is because the Ro-Kite will pull sideways during operation. The vessel must also be suitable to act as a towing vessel and be able to tow with sufficient pull force (i.e. 15 tonnes in the speed range of 2 – 5 knots).

### EQUIPMENT AVAILABILITY

LOCATION	COMPLETE ADDRESS	NUMBER OF SYSTEMS
Equipment Assistance Service (EAS) Baltic Sea	Narwicka 7a str., 80-557 Gdansk, Poland	1 x Ro-Boom Ro-Skim System
Equipment Assistance Service (EAS) Adriatic Sea	38/40 via del Trabaccolo Ravenna, Italy	1 x Ro-Boom Ro-Skim System