COMBINED RECOVERY SYSTEM SPEED SWEEP 1500 (DESMI)



GENERAL DESCRIPTION

The DESMI Speed Sweep 1500 and Ro-Kite system is a high speed sweeping system that can be used by one ship only. The system consists of two guiding booms connected to a sweeping boom which is fitted with a skimmer in the apex. The sweeping boom is fitted with three semipermeable 900 mm nets, with foam filled circular floats, which are used to slow down the speed of surface water with floating oil allowing oil to be contained and collected in the sweep apex compartment, while excess water without oil is escaping slowly beneath the skirt. This system allows the surface water and oil to be slowed by as much as 70%, which allows the oil to concentrate in the apex, ready for collection. The oil is recovered with an oil skimmer integrated in the boom system, in the apex.



MAIN COMPONENTS

The Speed Sweep 1500 system is composed of the following main components:

- 1 x DESMI Speed Sweep 1500 boom on reel
- 2 x Guide booms Ro-Boom 1300
- 1 x Ro-Kite 1500 with tow set for use with Speed Sweep 1500
- 1 x RoSkim 1500 weir skimmer for Speed Sweep 1500 with DESMI DOP250DUAL pump
- 1 x Remote control stand with air-blower
- 1 x Diesel Hydraulic Power Pack 57kW ATEX II
- 1 x Umbilical 50m (20+30m) with reel
- 1 x Set of spare parts and hoses
- 1 x 20ft ISO Container

KEY CHARACTERISTICS

The Speed Sweep 1500 system ensures more efficient operation than conventional oil boom configurations by using only one vessel in conjunction with a Ro-Kite. This provides a significant advantage as it allows the system to achieve higher towing speeds, of up to 3 knots. The key characteristics of the system are:

- Single vessel operation by use of a Ro-Kite 1500;
- Enhanced manoeuvrability due to single vessel operation;
- Certified to operate in Hazardous Area Zone II in accordance with the ATEX Directive (ATEX 94/9/EC) or similar;
- Suitable for any type of oil without any adjustments.



TECHNICAL SPECIFICATIONS

SYSTEM LENGTH	SWEEPING BOOM 30 M, GUIDE BOOM 2 X 15 M	
SWEEP OPENING	20 – 30 M	
FREEBOARD	APEX 0.52 M, GUIDE BOOMS 0.45 M	
DRAUGHT	APEX 0.72 M, GUIDE BOOMS 0.63 M	
SWEEPING SPEED	UP TO 3 KNOTS	
PUMPING CAPACITY	100 M ³ /H MAX	
UMBILICAL	50 M (20 M ON DECK + 30 M IN THE WATER)	
DISCHARGE PRESSURE	10 BAR MAX	
WEIGHT OF THE SYSTEM	20FT ISO CONTAINER WITH ALL EQUIPMENT, APPROX. 8400KG	

STORAGE & TRANSPORT

The Speed Sweep 1500 system is fully containerised and is stored in one 20ft ISO container, together with all required ancillaries for an autonomous operation.

The container has double cargo doors in one end and double cargo doors on one side. The container is furnished with twist locks for securing reels and power packs. Furthermore, the 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 Speed Sweep 1500 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 3-4m clear space in front of the doors. 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) North Sea	Barra Business Park, Mounie Drive, Oldmeldrum, Aberdeenshire, AB51 OGX, UK	2 x Speed Sweep
Equipment Assistance Service (EAS) Baltic Sea	Narwicka 7a str., 80-557 Gdansk, Poland	2 x Speed Sweep
Equipment Assistance Service (EAS) Adriatic Sea	38/40 via del Trabaccolo Ravenna, Italy	1 x Speed Sweep