

COMBINED RECOVERY SYSTEM

SPEED SWEEP 1500 (DESMI)



GENERAL DESCRIPTION

The DESMI Speed Sweep 1500 and Ro-Kite system is a high speed sweeping system to be used by one ship only. The system is manufactured like the Ro-Boom 1500 offshore containment boom and includes nine individual three metre buoyancy chambers. Three semipermeable 900 mm nets, with foam filled circular floats, 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 on reel – Single Vessel System
- 2 x DESMI guide booms 15m Ro-Boom 1300
- 1 x DESMI Ro-Kite 1500 with tow set for use with Speed Sweep 1500
- 1 x DESMI RO-SKIM 1500 weir skimmer for Speed Sweep 1500 with DESMI DOP 250 DUAL pump
- 1 x DESMI remote control stand with air-blower
- 1 x DESMI ATEX II hydraulic power pack for RO-SKIM & Winder
- 1 x Set of spare parts and hoses



KEY CHARACTERISTICS

The Speed Sweep 1500 system ensures faster operation than conventional oil boom configurations by using only one vessel in conjunction with a boom vane. 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:

- Single vessel operation by use of a boom vane (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	SWEEP 45M, GUIDE BOOM 2 X 16.5M
FRONT OPENING	20 – 30 M
FREEBOARD	APEX 0.52M, GUIDE BOOMS 0.45 M
DRAUGHT	APEX 0.72M, GUIDE BOOMS 0.63M
SWEEPING SPEED	UP TO 3 KNOTS
PUMPING CAPACITY	100M ³ /H MAX
DISCHARGE PRESSURE	10 BAR MAX
PUMP VISCOSITY RANGE	0 - > 1 MILLION CST
WEIGHT	APPROX. 8.4T/20FT CONTAINER

STORAGE & TRANSPORT

The Speed Sweep 1500 system is fully containerised and is stored in one 20 ft 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, being supplied in highly visible orange, RAL 2008. 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.



OPERATION

The Speed Sweep system is designed for rapid deployment and recovery directly from/in the 20 ft container in which it is delivered, by using a crew of three, as follows:

- Single Vessel System
- 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 Speed Sweep system 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 3-4 m clear space in front of the doors, and there must be an open gunwale to deploy/recover the system into/from the water.

EQUIPMENT AVAILABILITY

LOCATION	COMPLETE ADDRESS	NUMBER OF SYSTEMS
Equipment Assistance Service (EAS) North Sea	Barra Business Park, Mounie Drive, Oldmeldrum, Aberdeenshire, AB51 0GX, UK	2 x Speed Sweep
Equipment Assistance Service (EAS) Baltic Sea	Narwicka 7a str., 80-557 Gdansk, POLAND	2 x Speed Sweep