

Call for Purchase Proposals No. EMSA/SA/1/2025

Sale of Assets: Oil pollution response equipment

Appendix I.C Description of the Assets located in Ravenna, Italy – Lot 3

Type of equipment	Item	No. of items	First delivery	Description	EMSA ID
1.Desmi Tarantula Skimmer	Skimmer frame/weir module	1	15/07/2010	Skimmer frame/weir module with 2 x thrusters, 2 x PDAS DOP 250 pumps and Set of hydraulic hoses	CMPI312201
	Disc and brush module	1	15/07/2010	4 discs / 4 brushes	CMPI311901
	Remote Control	1	15/07/2010	Wireless radio remote control box	CMPI291301
	Control desk	1	15/07/2010	Control panel/hydraulic box adaptor	CMPI111301
	Storage reel in a 10' ISO container	1	15/07/2010	Reel for hose storage including the 50m umbilical cord	CMPI353401
	Spare pump	1	15/07/2010	Desmi PDAS DOP 250	CMPI283203

Type of equipment	Item	No. of items	First delivery	Description	EMSA ID
2. Markleen DHPP 60 Power Pack	Power Pack	1	28/02/2009	DHPP 60 Diesel engine	0753

Equipment description

1. Desmi Tarantula Skimmer

Manufacturer:

RO-CLEAN DESMI A/S
Hestehaven 21 B
DK-5260 Odense S
Phone: +45 6591 0201
Fax: +45 6590 8877
e-mail: roclean-desmi@desmi.com

Purchase year: 2010

The DESMI-TARANTULA combination skimmer system is the new generation of DESMI's vertical Archimedes' screw skimmers.

The DESMI-TARANTULA combination skimmer is a high-capacity light-weight ocean skimmer which skims 250 m³/h with up to 200 mm automatic weir lip adjustment. It works efficiently in waves heights up to 3 metres.

The skimmer combination skimmer system consists of a WEIR skimmer, a BRUSH DRUM skimmer and a DISC skimmer which means that the skimmer is very efficiency in all kinds of oil spills. It is very easy to change between the different type of skimmers. The use of only a few parts makes it a simple skimmer, easy to assemble and easy to maintain, resulting in low weight and high buoyancy/seaworthiness.

Using two DESMI modified positive displacement Archimedes' screw pumps in vertical design, type DOP-250, the DESMI-TARANTULA combination skimmer is able to efficiently recover light as well as heavy oil, also when mixed with debris normally found in connection with oil spills. The skimmer is fitted with a flotation system to provide the necessary buoyancy.

Hydraulic power to the skimmer pumps is supplied through hydraulic hoses connected to the power supply or remote-control box. A discharge hose connects the skimmer to the storage tank. The hoses will not affect the buoyancy of the skimmer as they are equipped with their own floats.

The DESMI-TARANTULA skimmer is designed as an advancing skimmer to operate in conjunction with a floating containment boom. The DESMI-TARANTULA skimmer is provided with two thrusters to secure the best recovery position in the floating containment boom. The thrusters are hydraulically driven and controlled from the remote-control box.



Tarantula Skimmer – weir module

The skimmer set consists of:

- 1) Skimmer frame weir module with 2 thrusters, 2 pumps and set of hydraulic hoses
- 2) Disc and brush modules
- 3) Remote control
- 4) Control desk
- 5) Storage reel in a 10' ISO container

1.1 Skimmer frame/weir module with thrusters, pumps and set of hydraulic hoses

Specification:

Dimensions:

Length	2450 mm
Width	2450 mm
Height	1550 mm

Draft: 950 mm

Weight (dry): 520 kg incl. thrusters
490 Kg excl. Thrusters

Skimmer pump: 2 pcs. DOP-250 DUAL vertical positive displacement Archimedes' screw type. (100 m3)

Max. recovery rate: 250 m³/h at 1 bar

Max. pressure: 10 bar

Hydraulic connections

Quick coupling 1" TEMA
Quick coupling 1½" TEMA
Quick coupling 3/8" TEMA
Quick coupling 3/8" TEMA

Hydraulic Thrusters

Power output thrusters	2x800 N (2X 80 kgf)
Propeller pipe housing	Seawater resistant aluminium
Dimensions (LxW)	240x440 mm approx.
Propeller housing diameter	243 mm
Housing flange material	Bronze

Bolts and nuts	Stainless steel
Propeller diameter	184 mm
Propeller speed	0-3000 rpm.
Zinc anodes	2 pcs each thruster
Weight	17 kg/each approx
Thrusters hydraulic motor	Hydromatik or equivalent
Lubricating system	Oil sump in gear box
Hydraulic hose connections	2x 1/2" pressure and return, 1x3/8" drain

Pumps DESMI DOP-250 Dual

The DESMI TARANTULA skimmer incorporates two DESMI DOP-250 pumps which deliver a maximum capacity of 200 m³/h and can develop discharge pressures up to 10 bar while maintaining nearly maximum flow.

Specification:

Length:	720 mm
Width:	390 mm
Height:	670 mm
Weight:	78 kg
Max. pressure:	10 bar
Max. capacity:	100 m ³ /h
Viscosity range:	1 to > 1 million cSt

Material

Screw:	Double-curved Archimedes' screw in cast stainless steel (Ni-Resist), machined in a 5-axis CNC centre.
Casing:	Casing in seawater resistant aluminium, cast iron, or stainless steel. Standard is aluminium. Replaceable polyethylene sealing ring.

Hydraulic system

Prime mover:	Danfoss hydraulic motor, type OMTS 160
Max. speed:	800 rpm continuously
Max. input power:	47 kW continuously
Max. output power:	38 kW continuously
Max. oil flow:	160 l/min. continuously
Max. inlet pressure:	210 bar continuously

Hydraulic connections

Pressure line:	3/4" - 1" quick coupling male
Return line:	3/4" - 1" quick coupling male
Drain line:	3/8" quick coupling male



DESMI DOP 250 PDAS Pump

Set of Hydraulic hoses set

It should be noted that the hydraulic hoses are old and show signs of wear and tear, and they may need to be replaced.

1.2 Disc and brush modules

Specification:

Disc Skimmer Head

No. of disc banks: 4 banks

No. of discs per bank: 15

Disc size: 495 mm dia. x 5 mm thick

Disc bank assembly: "Easy-drop-in-module" construction

Disc material: POM AH ELS (Anti-static)

Scrapers: Replaceable stainless steel blades

Brush Drum Skimmer Head

No. of brush drums: 4 drums

No. of disc sprockets per drum: 8

Drum diameter 500mm

Brush drum : Easy "drop in module" construction

Disc material: Aluminium AlMg3

Comb: Stainless steel/nitrile rubber

Disc/Brush drive:

Independent hydraulic drive to each bank, using 200cc hydraulic motors on a ring supply.

Hydraulic demand: Brush drive: Max. 20 litres, min. 100 bar. (50 rpm)

Disc drive: Max. 20 litres, min. 100 bar. (100 rpm)

Main frame: Robust marine grade aluminium structure to fit the Tarantula skimmer head, drive motors and disc/brush banks support.

Weight: With disc banks: 280 kg, and with brush drums: 260 kg.

Dimensions: L x W x H: 2100 x 2100 x 800 mm approx. (without skimmer floats)

Hydraulic hoses: Hydraulic hoses P/R:(2 x 1/2") and drain 1 x 3/8".



Brush Drum/Disc Skimmer Head

1.3 Remote Control for the skimmer / thrusters

Manufacturer:

Cavotec Micro-control as
Boks 284 - Tangen - NO-7501
Stjørdal - Norway
Tel: +47 74 83 98 60
Fax: +47 74 83 01 50
E-mail: microcontrol@cavotec.com

Purchase year: 2010

The DESMI TARANTULA skimmer system is designed for deployment from a vessel into an area where oil has been contained. The skimmer system is fitted with two hydraulic thrusters, allowing the operator to manoeuvre the system to where oil is most heavily concentrated. The remote control system is included in the skimmer set.



Radio Remote Control

1.4 Control desk

The control stand is developed for operation of:

- DESMI Terminator skimmer with thrusters and DBD140 module
- Hose reels
- Boom winders (if applicable)
- Water injection pump (if applicable)
- Air compressor (if applicable)

The control stand is operated with the Cavotec MC3000 remote control systems and connected to the hydraulic power supply through the hydraulic quick connectors
 Pressure 1 ¼" Female / Return 1 ½" Male / Drain 3/8" Male and Load sense 3/8" Female.

Specification:

Dimensions: Length: 0.8 m

Width: 0.8 m

Height: 1.20 m

Control valve: 2 x Danfoss PVG 32 proportional valve

Max. hydr. flow: 320 l/min.

Max. hydr. pressure: 210 bar

Relief valve setting: 240 bar

Hydr. connections: Tema stainless steel couplings

Power supply: Constant flow – 320 l/min.

Inlet (pressure): 1 ¼" female

Return: 1 ½" male

Drain: 3/8" male

Load sense 3/8" Female

Skimmer connections:

Skimmer pump 1 : 0-160l/min - 1" male/female 3/8" Female Drain

Skimmer pump 2 : 0-160l/min - 1" male/female 3/8" Female Drain

Thruster 1 : 0-25l/min - 1/2" male/female

Thruster 2 : 0-25l/min - 1/2" male/female

Disc/brush drive : 0-5 l/min - 1/2" male/female
Water injection pump : 0-25l/min - 1/2" male/female
Hose reel 1 : 0-25l/min - 1/2" male/female
Air compressor : 0-50l/min - 1/2" male/female
Boom winder 1 : 0-35l/min - 1/2" male/female
Boom winder 2 : 0-35l/min - 1/2" male/female



Control desk

1.5 Storage reel for umbilical hydraulic/oil hose in a 10' ISO container

The RO-CLEAN DESMI Reel is designed to store the umbilical hose of the TARANTULA Skimmer. The reel is sea water resistant aluminium. The frame is equipped with 4-point lifting points and forklift channels. The reel is split in two parts, one for the hydraulic hoses and other for the oil hoses.

Specifications:

Length	1800 mm
Diameter of the reel	1700 mm
Height	1869 mm
Width	1195 mm
Weight	647,4 kg
Length	50m



Reel with the umbilical hose and 10' container

2. Markleen DHPP60 Power Pack

Manufacturer: MARKLEEN TERRA , S.L.U.

Polígono Río Gállego, calle E, 22

50840 San Mateo de Gállego

Zaragoza (Spain)

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e-mail: markleen@markleen.com

Purchase year: 2009



The Markleen Hydraulic Power Pack is a unit for marine applications. It is ideal for running equipment such as boom reels, skimmers and pumps. The Power pack is a compact and robust unit provided with forklift tunnels and lifting points and protected with marine grade paints to resist corrosion.

This unit is driven by a diesel engine which moves a hydraulic gear pump. The pump will be coupled to the motor using an integral close coupled configuration, delivering variable flow. This hydraulic power unit consists of two vertical reservoirs (hydraulic oil and fuel). The hydraulic tank incorporates sump drain, oil level gauge, filler/breather assembly and return connections.

The fuel tank incorporates drain and fuel level indicator. It is provided with an ergonomic control panel that makes possible the operator controls the principal operational parameters from the engine.

The Power pack is provided with an ergonomic control panel that makes possible the operator controls the principal operational parameters from the engine.

Model	DHPP 60 EX ZONE II
Construction	Frame: Steel protected with marine grade paints Tanks: Stainless Steel AISI 304 Bodywork: Stainless Steel AISI 304
Engine	JCB PP 854 Ex-Proof
Start	Manual
Max. rated power	63 kW to 2200 rpm
Hydraulic Pump	Variable displacement pump
Heat exchanger	Air/Oil
Máx. hidráulic oil flow [l/min]	150
Max. hydraulic output [bar]	225
Number of hydraulic circuits	1
Fuel tank [litres]	95
Hydraulic oil tank [litres]	265
Hydraulic quick couplings (*)	Pressure: Male quick coupling 1" Return: Female quick coupling 1" Drain: Female quick coupling 3/8"
Controls	Start/ Emergency Stop lever Stop Accelerator Hydraulic ball valve for start and decompression
Gauges	Engine control box: Oil pressure, water temperature, exhaust temperature and tachometer Manometer Hydraulic oil level and oil temperature Fuel level
Handling and transport	4 hoisting points Forklift tunnels
Measurements (L x W x H) (mm)	2010 x 1160 x 1673
Weight (empty tanks / full tanks)	1500 / 1810