

Call for Applications No. EMSA/SA/1/2024

Sale of Assets: Sale of oil pollution response equipment

Annex I.A Description of the Assets – Lot 1

| Type of equipment | Item | No. of items | First delivery | Description | Label 1 | Label 2 |
|-------------------|----------------|--------------|----------------|--|------------|---------|
| 1. Sweeping arm | Frame | 1 | 25/11/2009 | VEEGARMEN RIGID-WEIR SKIMMER, Towing lines and chains 12 m, Koseq | CBNM362201 | 0110 |
| | Frame | 1 | 25/11/2009 | VEEGARMEN RIGID-WEIR SKIMMER, Towing lines and chains 12 m, Koseq | CBNM362202 | 0111 |
| | Pump | 1 | 25/11/2009 | SCREW/CENTRIFUGAL, Marflex, MSP 150-63 | CBNM283201 | 0112 |
| | Pump | 1 | 25/11/2009 | SCREW/CENTRIFUGAL, Marflex, MSP 150-63 | CBNM283202 | 0113 |
| | Crane | 1 | 25/11/2009 | Koseq | CBNM131501 | 0114 |
| | Crane | 1 | 25/11/2009 | Koseq | CBNM131502 | 0115 |
| | Control desk | 1 | 25/11/2009 | Crane hydraulic control | CBNM111301 | 0116 |
| | Control desk | 1 | 25/11/2009 | Crane hydraulic control | CBNM111302 | 0117 |
| | Ancillaries | 1 | 25/11/2009 | HOSE SET WITH QUICK CONECTION COUPLINGS (DISCHARGE 6", HYCRAULIC PRESS. 1", RETURN 1.5" & DRAIN 0.5") (12 m) | CBNM020201 | 0118 |
| | Ancillaries | 1 | 25/11/2009 | HOSE SET WITH QUICK CONECTION COUPLINGS (DISCHARGE 6", HYCRAULIC PRESS. 1", RETURN 1.5" & DRAIN 0.5") (12 m) | CBNM020202 | 0119 |
| | Remote control | 1 | 01/10/2015 | Wireless remote control for port side crane | n/a | 2525 |
| | Remote control | 1 | 01/10/2015 | Wireless remote control for starboard side crane | n/a | 2526 |

| Type of equipment | Item | No. of items | First delivery | Description | Label 1 | Label 2 |
|-------------------|--------------------|--------------|----------------|--|------------|---------|
| 2. Oil Boom | Segment | 1 | 25/11/2009 | Heavy duty single point inflation with ASTM connectors 250 m, Vikoma, Hi Sprint 2000 | CBNA073601 | 0130 |
| | Segment | 1 | 25/11/2009 | Heavy duty single point inflation with ASTM connectors 250 m, Vikoma, Hi Sprint 2000 | CBNA073602 | 0131 |
| | Towing lines set | 1 | 25/11/2009 | 2 TOW ROPE (BREAK LINE 1.5 TONNES) | CBNA374201 | 0132 |
| | Towing lines set | 1 | 25/11/2009 | 2 TOW ROPE (BREAK LINE 1.5 TONNES) | CBNA374202 | 0133 |
| | Towing bridles set | 1 | 25/11/2009 | UNICOM CONNECTOR TOWING BRIDLE | CBNA370601 | 0134 |
| | Towing bridles set | 1 | 25/11/2009 | UNICOM CONNECTOR TOWING BRIDLE | CBNA370602 | 0135 |
| | Towing lines set | 1 | 25/11/2009 | 2 TOW ROPE (BREAK LINE 1.5 TONNES) | CBNA374203 | 0136 |
| | Towing lines set | 1 | 25/11/2009 | 2 TOW ROPE (BREAK LINE 1.5 TONNES) | CBNA374204 | 0137 |

| | | | | | |
|--------------------|---|------------|---|------------|------|
| Towing bridles set | 1 | 25/11/2009 | UNICOM CONNECTOR TOWING BRIDLE | CBNA370603 | 0138 |
| Towing bridles set | 1 | 25/11/2009 | UNICOM CONNECTOR TOWING BRIDLE | CBNA370604 | 0139 |
| Storage reel | 1 | 25/11/2009 | 600 P, REEL ASSY YANMAR ENGINE & MOD. FRAME MASTER | CBNA353401 | 0140 |
| Ancillaries | 1 | 25/11/2009 | SPARK ARRESTOR FOR BOOM REEL | CBNA020201 | 0141 |
| Ancillaries | 1 | 25/11/2009 | AUTOMATIC SHUTDOWN VALVE FOR BOOM REEL | CBNA020202 | 0142 |
| Cover | 1 | 25/11/2009 | BOOM REEL COVER FOR BOOM REEL | CBNA121401 | 0143 |
| Cover | 1 | 25/11/2009 | BOOM REEL COVER FOR BOOM REEL | CBNA121402 | 0144 |
| Storage reel | 1 | 25/11/2009 | REEL ASSY YANMAR ENGINE & MOD. FRAME MASTER | CBNA353402 | 0145 |
| Air blower | 1 | 25/11/2009 | AIR PACK INFLATOR G.A. ELECTRIC START | CBNA032901 | 0146 |
| Air hose(s) | 1 | 25/11/2009 | FLEXIBLE WITH CAMLOCK CONNECTORS 10 m | CBNA053601 | 0147 |
| Ancillaries | 1 | 25/11/2009 | SPARK ARRESTOR FOR BOOM INFLATOR | CBNA020203 | 0148 |
| Ancillaries | 1 | 25/11/2009 | DEFLATOR KIT FOR BOOM INFLATOR | CBNA020205 | 0149 |
| Ancillaries | 1 | 25/11/2009 | GATE BOOM ASSEMBLY FOR U CONF. 4-5 METERS | CBNA020206 | 0150 |
| Ancillaries | 1 | 25/11/2009 | GATE BOOM ASSEMBLY FOR U CONFIGURATION 8-10 METERS | CBNA020207 | 0151 |
| Storage reel | 1 | 25/11/2009 | 600 P, SPARE BOOM REEL FOR CLEANING (NO PwPk) SLAVE REEL | CBNA353403 | 0152 |
| Power pack | 1 | 25/11/2009 | MOTOR - POWER PACK GP 10-2 ELECTRIC START (SPARE REEL FOR CLEANING) | CBNA272801 | 0154 |
| Ancillaries | 1 | 25/11/2009 | SPARK ARRESTOR FOR PwPk GP 10-2 EL. START (Spare reel for cleaning) | CBNA023208 | 0155 |
| Ancillaries | 1 | 25/11/2009 | SPARK ARRESTOR FOR PwPk GP 10-2 EL. START (Spare reel for cleaning) | CBNA023209 | 0156 |
| Hydraulic hose(s) | 1 | 25/11/2009 | SET POWERPACK TO REEL 10 m | CBNA223601 | 0157 |
| Spare parts | 1 | 25/11/2009 | REPAIR KIT NEOPRENE BOOM COLE GLUE | CBNA343101 | 0158 |
| Spare parts | 1 | 25/11/2009 | REPAIR KIT NEOPRENE BOOM COLE GLUE | CBNA343102 | 0159 |
| Spare parts | 1 | 25/11/2009 | SPARES KIT AIRPACK AP/D080 YANMAR SERVICE | CBNA343103 | 0160 |
| Spare parts | 1 | 25/11/2009 | SPARES KIT AIRPACK AP/D080 YANMAR SERVICE | CBNA343104 | 0161 |
| Spare parts | 1 | 25/11/2009 | 600 P, SPARES KIT REEL HI/0690 YANMAR SERVICE | CBNA343105 | 0162 |
| Spare parts | 1 | 25/11/2009 | SPARES KIT POWERPACK GP10 | CBNA343106 | 0163 |
| Spare parts | 1 | 25/11/2009 | 10 VALVE AIR XG C/W YELLOW CAP | CBNA343107 | 0164 |
| Spare parts | 1 | 25/11/2009 | 40 CAP AIR VALVE XG YELLOW | CBNA343108 | 0165 |
| Spare parts | 1 | 25/11/2009 | 2 PB620 ASSY C/W MONSUN XG AVALLOY VALVE ADAPTOR | CBNA343109 | 0166 |
| Spare parts | 1 | 25/11/2009 | 12 BREAK LINK ASSY 3 TONNE | CBNA343110 | 0167 |

| Type of equipment | Item | No. of items | First delivery | Description | Label 1 | Label 2 |
|-------------------|-------|--------------|----------------|--|------------|---------|
| 3. Skimmer | Frame | 1 | 25/11/2009 | WEIR SKIMMER SYSTEM, Markleen WMS 280 | CBNI302201 | 0230 |
| | Pump | 1 | 25/11/2009 | TWIN DISC SCREW (10BAR), Foilex, 250 TDS | CBNI283201 | 0231 |

| | | | | | |
|-------------------|---|------------|---|------------|------|
| Pump | 1 | 25/11/2009 | TWIN DISC SCREW (10BAR), Foilex, 250 TDS | CBNI283202 | 0232 |
| Thruster | 1 | 25/11/2009 | THRUSTER SET (TWO THRUSTERS) FOR MARKLEEN WMS 280 SKIMMER | CBNI324101 | 0233 |
| Remote control | 1 | 25/11/2009 | MANUAL REMOTE PANEL FOR MARKLEEN WMS 280 SKIMMER (4 CHANEL) | CBNI291301 | 0234 |
| Storage reel | 1 | 25/11/2009 | HOSE REEL FOR 60 METERS HYDRAULIC & CARGO HOSES | CBNI353401 | 0235 |
| Hydraulic hose(s) | 1 | 25/11/2009 | QUICK CONECTION COUPLINGS 25 m | CBNI223601 | 0236 |
| Hydraulic hose(s) | 1 | 25/11/2009 | QUICK CONECTION COUPLINGS25 m | CBNI223602 | 0237 |
| Hydraulic hose(s) | 1 | 25/11/2009 | QUICK CONECTION COUPLINGS 10 m | CBNI223603 | 0238 |
| Oil hose(s) | 1 | 25/11/2009 | WITH CMA-LOCK COUPLING 25 m | CBNI263601 | 0239 |
| Oil hose(s) | 1 | 25/11/2009 | WITH CMA-LOCK COUPLING 25 m | CBNI263602 | 0240 |
| Oil hose(s) | 1 | 25/11/2009 | WITH CMA-LOCK COUPLING 10 m | CBNI263603 | 0241 |
| Hydraulic hose(s) | 1 | 25/11/2009 | PRESSURE | CBNI223604 | 0242 |
| Hydraulic hose(s) | 1 | 25/11/2009 | PRESSURE | CBNI223605 | 0243 |
| Hydraulic hose(s) | 1 | 25/11/2009 | RETURN | CBNI223608 | 0244 |
| Hydraulic hose(s) | 1 | 25/11/2009 | RETURN | CBNI223609 | 0245 |
| Ancillaries | 1 | 25/11/2009 | FLOATING DEVICES FOR CARGO HOSES | CBNI020201 | 0248 |
| Power pack | 1 | 25/11/2009 | Diesel hydraulic, Markleen DHPP 90 | CBNI272802 | 0247 |

| Type of equipment | Item | No. of items | First delivery | Description | Label 1 | Label 2 |
|-------------------|--------------------|--------------|----------------|---|---------|---------|
| 4. Decanting | Oil water detector | 1 | 01/10/2015 | Oil/water detector system for decantation | n/a | 2101 |

| Type of equipment | Item | No. of items | First delivery | Description | Label 1 | Label 2 |
|-------------------|------------|--------------|----------------|---------------------|---------|---------|
| 5. Discharging | Flow meter | 1 | 01/10/2015 | Portable, Micronics | n/a | 2102 |

| Type of equipment | Item | No. of items | First delivery | Description | Label 1 | Label 2 |
|-------------------|---------------------------|--------------|----------------|--|------------|---------|
| 6. Testing | Mini lab | 1 | 25/11/2009 | DENSITY UNIT NOT HEATING ASTM D1298 | CBNH231701 | 0249 |
| | Ancillaries | 1 | 25/11/2009 | MINILAB HYDROMETER L50SP | CBNH020201 | 0250 |
| | Mini lab | 1 | 25/11/2009 | FOLLING SPHERE VISCOSIMETER COMPLETE | CBNH234301 | 0251 |
| | Ancillaries | 1 | 25/11/2009 | INTERCONTROL ULTRASONE WANDDIKTE (WALL THICKNESS) METER TYPE TM8812 | CBNH020202 | 0252 |
| | Ancillaries | 1 | 25/11/2009 | PORTABLE ULTRASONIC FLOW METER PORTAFLOW 300 | CBNH020203 | 0253 |
| | Gas detector/explosimeter | 1 | 25/11/2009 | GASMASTER 4 CENTRAL | CBNH191801 | 0254 |
| | Gas detector/explosimeter | 1 | 25/11/2009 | GASMASTER 1SINGEL CHANNEL | CBNH191802 | 0255 |
| | Flash point tester | 1 | 01/10/2015 | Series 3, Closed Cup; Ambient to 300°C; Automatic flash detection; Small sample size - 2 or 4ml. | n/a | 2076 |
| | Gas detector | 1 | 01/10/2015 | Volatile Organic Compounds gas monitor and datalogger for work in hazardous environments. | n/a | 2103 |

| Type of equipment | Item | No. of items | First delivery | Description | Label 1 | Label 2 |
|-------------------|------------------|--------------|----------------|---------------|---------|---------|
| 7. Cleaning | Cleaning machine | 1 | 01/10/2015 | High pressure | n/a | 2099 |
| | Cleaning machine | 1 | 01/10/2015 | High pressure | n/a | 2100 |

Equipment description

1. Sweeping Arm system

Manufacturer:

KAMPERS OIL SPILL EQUIPMENT B.V

Oosthavenzijde 5

P.O. Box 5606

3297 ZG Puttershoek

The Netherlands

Tel: +31 78 6763811

Fax: +31 78 6764853

E-mail: design@koseq.com Web-site: <http://www.koseq.com>

Year of purchase 2009

The Koseq Rigid Sweeping Arm System consists of two 12 meter Sweeping Arm Structure with foldable end, oil transfer pumps, pumps ancillaries, control panel, hydraulic system, oil hoses, crane and hydraulic power pack.

The sweeping arm system is supplied with an integrated weir skimmer and centrifugal pump with screw impeller, Marflex MSP150-63 pre-installed with a hot water current radial system to facilitate pumping of high viscosity oil. The system is provided with a remotely controlled self-cleaning grating to prevent debris to obstruct the skimmer and pump.

The system consists of:

- 1.1 Sweeping Arms
- 1.2 Marflex Centrifugal Pump MSP150-63 (sweeping arms)
- 1.3 Sweeping arms cranes, Lagendijk SK 5/10-5000/1000
- 1.4 Control cabinets
- 1.5 Oil hoses/hydraulic hoses and cables (Sweeping arms and associated cranes)
- 1.6 Radio remote control

1.1 Koseq Rigid Sweeping Arms

Description

Each sweeping arm is made up of an outer pontoon, a bridge and an inner pontoon welded together. The inner pontoon contains an adjustable oil collection chamber in which the pump is located.

Foldable ends

To make transport and storage easier, the sweeping arm pontoons are equipped with foldable ends.

Specification:

| | |
|------------------------------------|--------------------------------------|
| Function: | Collecting of oil |
| Year of purchase: | 2009 |
| Overall Length: | 12115 mm |
| Overall width: | 3330 mm |
| Overall height: | 2370 mm |
| Weight (including pump and hoses): | 4300 kg. |
| Type of skimmer: | integrated weir skimmer |
| Skimmer pumps: | centrifugal pump with screw impeller |



Fig. 1. Koseq Rigid Sweeping Arm

1.2 Marflex Centrifugal Pump (Light/Medium oil skimmer module)**Manufacturer:**

Marflex B.V.

Louis Pasteurstraat 12

3261 LZ Oud-Beijerland

The Netherlands

Tel: +31 186 89 02 00

Fax: +31 186 89 02 49

Email: info@marflex.com

Website: www.marflex.com

The Marflex pump type MSP-150-63 is a hydraulically driven single stage vertical centrifugal pump that has been designed for efficient handling of viscous liquids, bulky solids and shear-sensitive liquids. The MSP 150 pump is based upon a centrifugal screw impeller that combines the properties of a screw pump with those of a centrifugal one.

Specification:

| | |
|--------------------------------|--------------------------------------|
| Design: | Single stage centrifugal |
| Capacity/head: | 360 m ³ /h – 40 mlc. max. |
| Viscosity/specific gravity: | 1.0 cSt. at 20°C/1.0 |
| Speed: | 2000 rpm max. |
| Required power: | 45 kW |
| Hydraulic motor type: | Axial plunger with mechanical seal |
| Hydraulic working pressure: | 200 bar |
| Hydraulic pressure, max.: | 320 bar |
| Hydraulic flow, max.: | 130 l/min |
| Maximum outer diameter: | 490 mm |
| Height: | 610 mm |
| Weight, excl. hydraulic hoses: | 83 kg |



Fig. 2. Marflex Pumps

1.3 Sweeping arm crane, Lagendijk SK 6.8-5000/12.5-1000**Manufacturer:**

Lagendijk-Constructie
Choorhoekseweg 3
4424 NW Wemeldinge
The Netherlands
Tel: 0113-621385
Fax: 0113-622591
E-mail: info@lagendijk-constructie.nl
Web-Site: www.lagendijk-constructie.nl

These Lagendijk store cranes are intended for operating the Koseq Sweeping Arm System for which specially purpose were designed.



Fig. 3. Sweeping Arm Crane

Specification:

| | |
|-----------------------|------------------------------------|
| Year of construction: | 2009 |
| Type: | SK 6.9-5000/13.3-1000 |
| Main dimensions: | Length: 13.5 m – Width: 1.9 m |
| Propulsion: | Hydraulic |
| Lifting capacity: | 5000 kg – 8.9 m / 1000 kg – 13.3 m |
| Tilt: | 3° max. |

1.4 Control cabinets, control desk



Fig. 4 and 5. Control Panel of Koseq Sweeping Arm

The crane and sweeping arms are operated through the control panel attached to the crane top. The panel is made up of 6 handles with which the operator can control the following elements:

- Sweeping arm pump.
- Sweeping arm weir skimmer height.
- Sweeping arm debris screen.
- Crane winch (1 Ton.)
- Crane winch (5 Ton.)
- Crane Cylinder.

1.5 Oil hoses/hydraulic hoses and cables (for sweeping arms and associated cranes)

The pressure, return and drain lines for the hydraulic motor and the discharge line for the pump consist of flexible hoses. All hoses are provided with stainless steel couplings.

Set of hoses consists of:

Hydraulic pressure hose: 1 “

Hydraulic return hose: 1½ “

Discharge hose: 6 “

1.6 Radio remote control

The crane and sweeping arms control panel is additionally equipped with a wireless remote control.

Specification:

| | |
|--|--|
| Model: | AUTEC FJL |
| Power supply: | 7.4 VDC (Li-Ion Battery) 7.2 VDC (NiMH Battery) |
| Frequency band: | 863-870 MHz (128 channels) – 915 MHz (260 channels) 447 MHz (32 channels) – 434 MHz (63 channels) |
| Hamming distance: | ≥ 15 |
| Typical working range: | 100 m |
| Average usage time fully charged battery (continuous use at 20°C): | 18.5 h (Li-Ion), 11 h (NiMH Battery) |
| Safety performance of the STOP function: | (EN ISO 13849-1 / EN IEC 62061) up to PL e, cat. 4 / SIL 3 |
| Protection degree: | IP65 (NEMA 4) |
| Operating and storage temperature operating: | (-25 °C) ÷ (+55 °C) / storage: (-40 °C) ÷ (+85 °C) |
| Dimensions: | 221 x 170 x 134 mm |
| Weight: | 1.4 kg |



Fig. 6. Sweeping arm radio remote control

2. Vikoma Hi Sprint Boom 2000 Set

Manufacturer:

Vikoma International Ltd.
Kingston Works
Kingston Road
East Cowes, Isle of Wight
PO32 6JS. UK
Tel: +44 (0)1983 200560
email: sales@vikoma.com

Year of purchase 2009

The Set of Vikoma Hi Sprint Boom 2000 consists of:

- 2.1 Vikoma Hi Sprint Boom 2000 sections (2 x 250 m)
- 2.2 Towing ropes and bridles (2 Sets)
- 2.3 Vikoma Type 600 Boom Reel with Yanmar powerpack (x1) and without the powerpack (x1)
- 2.4 Air pack inflators AP/0080 with boom deflator kit and 10 m air hose
- 2.5 Boom gate assemblies for U configuration (8-10 m and 4-5 m)
- 2.6 Spare parts kits for the boom and reels

2.1 Vikoma Hi Sprint Boom 2000 section

Specification:

Dimensions

| | |
|-----------------|----------------------|
| Length: | 250 m (50m sections) |
| Weight: | 12.68 kg/m |
| Minimum height: | 2000 mm |
| Freeboard: | 750 mm |
| Draft: | 1250mm |

Fabric construction

| | |
|-------------------|----------------------------------|
| Material: | Reinforced double-faced Neoprene |
| Tensile strength: | 309.75kN |
| Tear strength: | 323 N |
| Ballast chain: | 19 mm (enclosed) |



Fig. 7. Vikoma High Sprint Boom 2000 section

2.2 Towing bridle and ropes set

Specification:

| | |
|-------------|--------------------------------------|
| Towing bar: | Marine grade aluminium, self-buoyant |
| Strops: | High integrity webbing (no metal) |
| Rope: | Polypropylene self-buoyant |

2.3 Type 600 Boom Reel

Vikoma Type 600 reels are intended for the storage, deployment and recovery the Vikoma High Sprint Boom 2000. Boom set includes 3 boom reels:

1 x Vikoma Type 600 Boom Reel with Yanmar powerpack and

2 x Vikoma Type 600 Boom Reel without the powerpack (1 for the boom storage and 1 spare for the boom cleaning). The covers for 2 reels are included

Specification:

Dimensions

| | |
|--|--|
| L x W x H: | 195 cm x 364 cm x 233cm |
| Weight: | 1400 kg (bare reel) |
| Hydraulics (reel drive + control): | Double stage planetary gearbox driven by hydraulic motor; Forward and reverse; Dead-man's stop; Low/high torque selection 0-12 rpm |
| Construction (Reel structure and spool): | Steel tube and box section |
| Operation (lifting and securing): | Four tested lifting ayes, forklift pockets and ISO blocks |
| Power Pack Requirements: | The GP10-2 Diesel/Hydraulic power pack can be used to power this reel |



Fig. 8. Type 600 Boom Reel

The hydraulic power pack, which is mounted on the reel frame, consists of a single cylinder air-cooled diesel engine driving two hydraulic pumps via a reduction ratio unit.

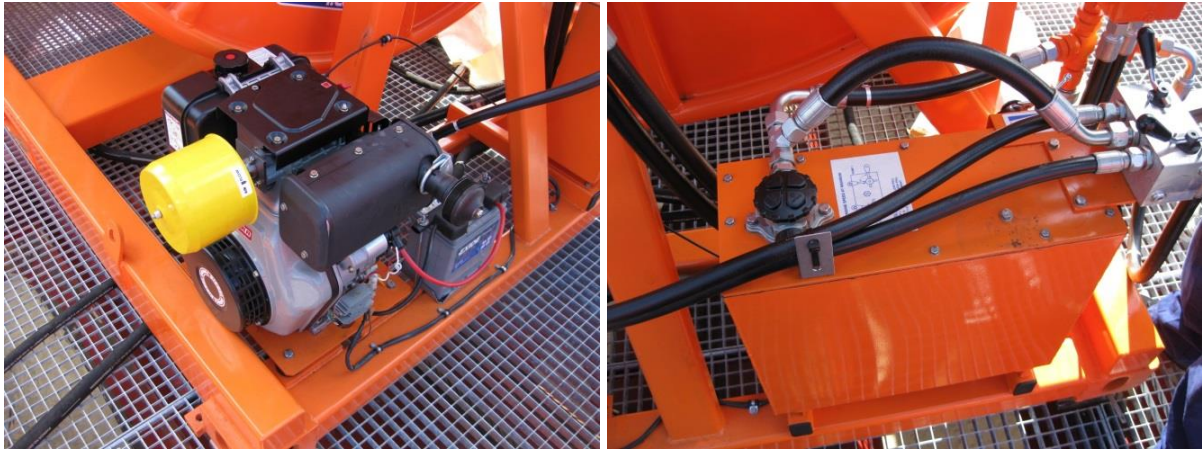


Fig. 9 and 10. Type 600 Boom Reel integrated power pack diesel engine and hydraulics

2.4 Air pack inflator AP/0080 with boom deflator kit (to be serviced)

Specification:

| | |
|-----------------------|--|
| L x W x H: | 84 cm x 45 cm x 59 cm |
| Weight: | 75 kg (dry) |
| Engine: | Single cylinder diesel, air cooled; Electric start |
| Power: | 4.1 kW @ 3300 rpm |
| Safety devices: | Overspeed shut down valve; Spark arrestor |
| Fuel Tank: | 3.5 l |
| Type: | Centrifugal, high volume, low pressure |
| Control: | Via engine speed |
| Frame and belt cover: | Marine grade aluminium alloy |

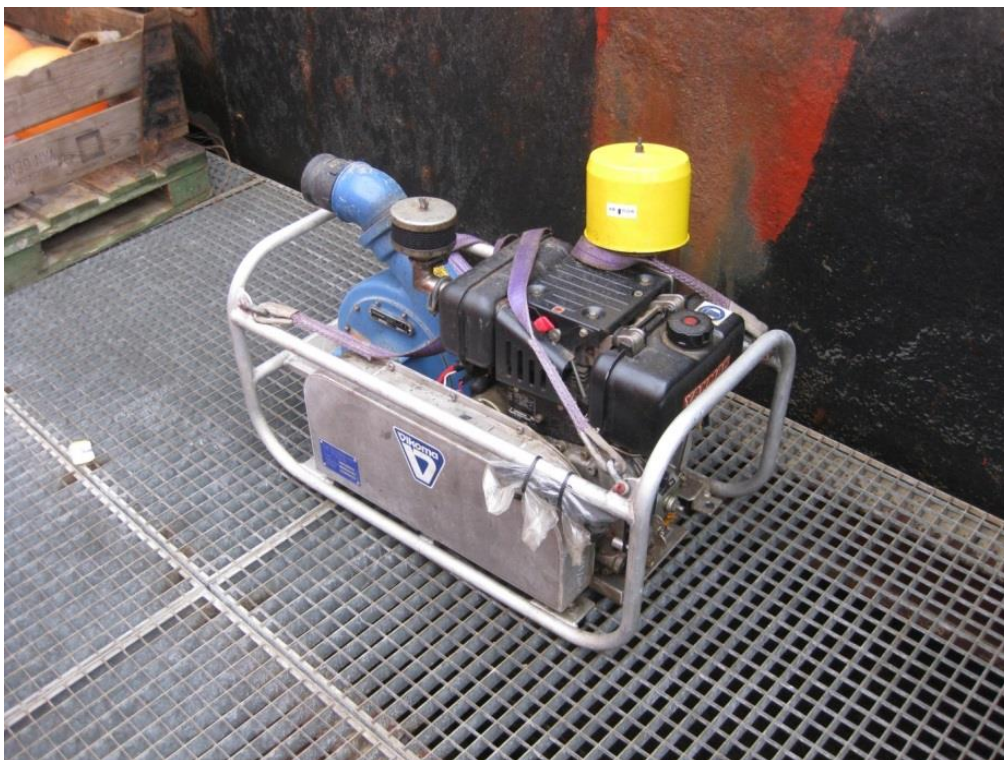


Fig. 11. Air pack inflator AP/0080

2.5 Boom gate assemblies for U configuration 8-10 m and 4-5 m

The Vikoma High Sprint Boom 2000 can be deployed in so called “U” formation. To achieve this formation it is necessary to create a gap (a gate) between boom sections in the apex of the boom. For that purpose the boom is equipped with two gate boom assemblies: 8-10 m and 4-5 m.



Fig. 12. Boom gate assembly for "U" configuration

2.6 Spare parts kits for the boom and reels

Spare parts kits for the boom and reels are not complete and would require update.

3. Markleen WMS 280 Weir Skimmer System

Manufacturer:

Markleen AS

Vollen Marina

Slemmestadveien 416

1390 Vollen, Norway

www.markleen.com

Year of purchase: 2009

The skimmer set consists of:

- 3.1 Skimmer frame with thrusters
- 3.2 Skimmer pump
- 3.3 Hydraulic Remote Control Panel
- 3.4 Hose Reel
- 3.5 Oil and Hydraulic Hoses
- 3.6 Markleen DHPP 90 Power Pack

3.1 Skimmer frame with thrusters

Specification:

Weir skimmer head

| | | |
|--|-------------------|--------------------|
| Skimmer Capacity: | m ³ /h | 280 |
| Dimensions L x W x H (frame incl. pump): | mm | 3180 x 2500 x 1400 |
| Total skimmer weight, dry: | kg | 380 |
| Pump weight: | kg | 2 x 120 |
| Shipping volume: | m ³ | 7.0 |

The skimmer is hydraulically operated and it is fitted with two hydraulic driven thrusters to allow the operator to manoeuvre the skimmer to where oil is most heavily concentrated.



Fig. 13. WMS 280 Weir Skimmer

3.2 Skimmer pump

Manufacturer:

FOILEX Eng. AB
Säterigatan 25
417 64 Goteborg
SWEDEN
Tel: +46-31 222525
Fax: +46-31 222595
info@foilex.com
Year of purchase: 2009

Specification:

| | | |
|------------------------------|--|------------------------------|
| Pump | | 2 x FOILEX TDS 250 Pump head |
| Capacity, continuous: | m ³ /h | 2 x 140 @ 625 rpm |
| Capacity intermittent: | m ³ /h | 2 x 165 @ 750 rpm |
| Max. pressure: | bar | 10 |
| Viscosity range: | cSt | 0 - 10 ⁶ |
| Debris handling: | 4 cutting knives at inlet and 3 at outlet in each pump | |
| Inlet opening: | mm | 250 x 150, 360°, each pump |
| Maximum solids dia: | mm | 65 |
| Hydraulic flow rate: | l/min | 0 - 150 |
| Max. hydraulic oil pressure: | bar | 200 cont. |



Fig. 14. Foilex TDS Pumps

3.3 Hydraulic Remote Control Panel



Fig. 15. Hydraulic Remote Control Panel

The Hydraulic Remote Control Panel allows operating and moving the skimmer to the desired positions.

3.4 Hose Reel

The reel is specially designed to accommodate 60 meters of 6" discharge hose and two sets of 60 meters of hydraulic hoses. Each of the two separate wheels has an independent brake/spoke stop.

Specification:

Length: 1200 mm

Width: 1150 mm

Height: 1300 mm

Weight: 350 kg (incl. hoses)



Fig. 16. Hose reel

3.5 Oil and Hydraulic Hoses

The set of hoses for the skimmer WMS 280 Weir Skimmer consists of:

- Hydraulic hose 1" quick connection couplings (25m + 25m+ 10m);
- Cargo hose 6" with camlock coupling (25m + 25m+ 10m);
- Hydraulic pressure hose ¾";
- Hydraulic return hose 1";
- Floating supports for the umbilical.

3.6 Markleen DHPP 90 Power Pack

Manufacturer:

Markleen AS

Vollen Marina

Slemmestadveien 416

1390 Vollen, Norway

Tel: +47 66 85 51 40
Fax: +47 66 85 51 41
E-mail: markleen@markleen.com
www.markleen.com

Year of purchase: 2009

Specification:

| | | |
|------------------------------|---|-------------------|
| Model: | MARKLEEN DHPP 90 | |
| Engine: | John Deere 4 cylinder water-cooled diesel engine | |
| Starter: | Electric. 12 V / 140 Ah battery. | |
| | Optional spring starter. | |
| Max. rated power: | 93 kW @ 2400 rpm | |
| Hydraulic pump: | Variable displacement pump with axial pistons and open loop circuit. | |
| Load sensing control: | Standard | |
| Heat exchanger: | Air / Oil | |
| Max. hydraulic flow rate | l/min | 175 |
| Max. hydraulic oil pressure | bar | 310 |
| Number of hydraulic circuits | 1 - 6 | |
| Build of: | Stainless steel frame, tanks & panels | |
| Fuel tank: | l | 120 |
| Hydraulic oil tank: | l | 300 |
| Hydraulic couplings: | Pressure, return & drain on each circuit | |
| Controls: | Proportional distributor valve on each circuit, | |
| | accelerator, emergency stop button. | |
| Instruments: | Pressure gauge for each circuit, hydraulic oil level and temp., fuel level gauge. | |
| Handling and transport: | 4 hoist points, 2 ISO fork tunnels. | |
| Measurements (l x w x h): | m | 1.75 x 1.2 x 1.55 |



Fig. 17. Markleen DHPP 90 Power Pack

4. Decanting: Interface detector

Manufacturer:

Aquasant Measuring Technique Ltd
Hauptstrasse 22
CH - 4416 Bubendorf / Switzerland
+41 (0)61 935 5000
www.aquasant-mt.com

Year of purchase 2015



Fig. 18 Oil/water interface detector

The measurement unit processes the digital measurement signal transmitted by the measurement technology. The intrinsically safe voltage supply to the measurement electronics in the connection head is provided via the signal line. A modern operating and calibration concept allows for an extremely short commissioning of the analog measurement. Measurement signal mA, percent or impulse value are displayed, as selected, on the display. An mA analog signal that corresponds to the measurement value and a relay output are available as output signals. The membrane keyboard with a functional and fully graphic display contributes toward the user friendliness and safe working.

5. Discharging: Flow meter

Manufacturer:

Micronics Ltd
Knives Beech Business Centre
Davies Way, Loudwater, High Wycombe
Bucks HP10 9QR.
+41 (0)1628 810456
www.micronicsltd.co.uk

Year of purchase 2015



Fig 19 & 20 Portaflow 300

Specification:

| | |
|-----------------------|--|
| Model: | PORTAFLOW 300 |
| Weight: | < 1.5 kg |
| Dimensions: | 275 x 150 x 55 mm |
| Keypad: | IP68 16 key tactile membrane |
| Connections: | IP66 Lemo connectors |
| Temperature range: | 0°C to +50°C operating -10° to +50°C storage |
| Power supply/charger: | Input 100-260 VAC ±10% @ 50/60 Hz Max. 9 watts |
| Output: | 9VDC unregulated |

6. Sampling / Testing

Sampling / testing equipment consists of:

6.1 Zematra Mini Lab:

- 6.1.1 Densimeter
- 6.1.2 Hydrometer
- 6.1.3 Viscosimeter

6.2 Gas detectors

6.3 Flash point tester

6.1 Zematra Mini lab.

Manufacturer:

Zematra B.V.
Steenspil 28
4661TZ Halsteren
The Netherlands

Tel: +31 (0)164 68 77 70
Fax: +31 (0)164 68 05 12

Year of purchase: 2009

Zematra's Mini Lab contains every necessary piece of test equipment for testing the main parameters of your ships fuel and lubricants.

The test equipment is safely contained in a robust casing which can be fixed against a wall to save space. The two folding doors and extendable bottom plate makes the equipment easily accessible and after testing it can be neatly stowed away and locked safely inside the cabinet.



Fig. 21. Zematra Mini-lab in the cabinet

6.2 Gas detectors

6.2.1 Benelux Mini Rae 3000

Manufacturer:

RAE Benelux bvba
Amsterdamstraat 30
2321 Hoogstraten
België
tel: [+32 \(0\)3 313 80 03](tel:+322033138003)
fax: [+32 \(0\)3 293 42 46](tel:+322032934246)
info@rae.be
www.rae.be

Year of purchase: 2015

The MiniRAE 3000 is a comprehensive handheld VOC (Volatile Organic Compound) monitor that uses a third-generation patented PID technology to accurately measure one of the highest levels of ionizable chemicals available on the market.



Fig. 22. Mini Rae 3000

6.2.2 Gasmaster 4 central and Gasmaster 1 single channel

Manufacturer:

Crowcon Detection Instruments Ltd.

172 Brook Drive, Milton Park, Abingdon, Oxfordshire, OX14 4SD

www.crowcon.com

Year of purchase: 2009

The Crowcon Gasmaster is a compact, versatile and powerful gas detection control panel that combines simple operation with an extensive array of input and output functions. Crowcon Gasmaster provides all the information you need about your gas and fire detectors at a glance.



Fig. 23. Crowcon Gasmaster 4 display

6.3 Flash point tester

Manufacturer:

Stanhope-Seta

London Street

Surrey

KT16 8AP

UK

service@stanhope-seta.co.uk

Year of purchase: 2015

Setaflash Series 3 ActiveCool provides fast and reliable flash point results and requires minimum operator expertise. It has been designed to rapidly and efficiently carry out Flash / No Flash tests to determine the flash point of liquids and semi-solids in the 10 to 135 °C temperature range.



Fig.23. Seta flash point tester

7. Cleaning machine

Manufacturer:

Alfred Kärcher SE & Co. KG
Alfred-Kärcher-Strasse 28-40
71364 Winnenden / Germany
Tel. +49 (0) 7195 / 14-0

Year of purchase: 2015

Specifications:

| | |
|---------------------|------------------------------------|
| Type: | HDS-E 8/16-4 M 12 kW |
| kW Power supply | (~V/Hz) 3/420/50 |
| Water flow rate | (l/h) 300-760 |
| Pressure | (bar/MPa) 30-160/3-16 |
| Max. temperature | (°C) 30/85 |
| Connected load | (kW) 16.5kW |
| Fuel/Detergent tank | (l) 25 + 20 |
| Weight | (kg) 108 |
| Dimensions | (L x W x H) (mm) 1330 x 750 x 1060 |



Fig. 24. Cleaning machine