

# EMSA selects skimmer and rigid sweeping arm technology pioneers to combat oil spills

**Koseq**, The Netherlands and **Ro-Clean Desmi A/S**, Denmark

The European Maritime Safety Agency (EMSA) have serviced their tankers *Santa Maria* and *Mistra Bay* with Koseq and Ro-Clean Desmi oil recovery equipment including: Tarantula offshore skimmers, Ro-Boom 2000 offshore booms, Rigid Sweeping Arms with handling cranes and all Zone II diesel driven Power Packs. On top of this, the newly EMSA contracted tankers *Salina Bay*, *Aktea*, *Mersey Fisher*, *Galway Fisher* and *Forth Fisher* are to be equipped this Spring with the same as well.

## Rigid Sweeping Arm

The unique patented Rigid Sweeping Arm is a free floating structure with an inner and outer pontoon connected together with a bridge construction for guiding the oil to the pump. The design and dimensions of the Rigid Sweeping Arm offers sufficient stability during oil recovery operation, even in rough seas. These sweeping arms are also used by the Coast Guards of The Netherlands, Germany and Spain.

The sweeping arm is deployed alongside the vessel by means of a dedicated crane. From the crane operation stand, all crane functions and all modes and pump in the sweeping arm are handled by only one man, helping to enhance operation safety. Because of the vessel's forward movement, the oil/water mixture is guided along the sweeping arm to the Weir skimmer oil recovery chamber, in which the hydraulically driven screw pump, with a capacity of 350 m<sup>3</sup>/hr, is mounted.

From here, the oil/water mixture is pumped to the recovery vessel's collecting tanks via a flexible hose. Here, the water is separated from the oil through the difference in specific weight, and the excess water is then pumped overboard. The complete Weir oil collecting chamber and pump can easily be replaced by a complete purpose built brush or belt conveyor skimmer cassette within 30 minutes, which allows the oil recovery operator to use the sweeping arm with all different oil types and, also, choose the best suitable oil recovery method for recovering heavy or light, thick or thin oils under difficult sea conditions.

## Tarantula offshore skimmer

The wireless controlled Tarantula offshore skimmer design represents a significant advancement within skimmer technology for a wide range of oils. Two Desmi DOP 250 dual Archimedes' screw pumps have been integrated at the aluminium skimmer head, giving a total capacity of 250 m<sup>3</sup>/h. Pump viscosity range is up to three mio. cSt when using steam/water injection flanges. Furthermore, the skimmer is equipped with powerful hydraulically driven thrusters for easy skimmer positioning and thereby optimum oil recovery conditions.

## Ro-Boom 2000 offshore boom

The Ro-Boom offshore boom is still a bench mark for containment booms after almost 30 years in operation around the world. More than 600,000 metres have been sold over the years across six continents. The Ro-Boom 2000 is designed for offshore conditions with a large 600 mm freeboard and 1,100 mm



KOSEQ Sweeper Arm in Prestige spill.

draft. The carefully calculated relationship between rubber boom wall and chain length ensures that the boom keeps an optimum position in the water during sweeping, a unique feature.

## The Desmi DOP Pump

The DOP pump is another bench mark within the industry. The DOP-250 dual has been used and tested successfully all over the world, including pumping Bitumen with an extremely high viscosity up to cSt. 3,000,000.

## VOS

The Koseq New Victory Oil Sweeper (VOS) is the next generation of width adjustable Rigid Sweeping Arms. Design improvements based on many practical applications has resulted in a totally new concept with all the advantages of the Rigid Sweeping Arm system. The patented Victory Oil Sweeper is designed to serve smaller vessels with little deck space, enabling one to trail the VOS alongside their vessels for offshore oil recovery operations, and working near offshore platforms and drilling rigs. For oil recovery operations in estuaries, deltas, rivers and or confined areas, the VOS can be placed in front of a tug or push boat. The VOS consists of two self floating movable arm sections and a centre floatation Weir oil collecting chamber with two 350 m<sup>3</sup> capacity hydraulically driven screw pumps.

All advantages of the existing Rigid Sweeping Arm systems are incorporated. The VOS can be built in different sizes and will be smaller when folded, but has more sweeping width when opened to its full 120 degrees. The angle of the VOS is fully adjustable to suit actual working conditions, giving one a choice between a larger sweeping area and or higher sweeping speed with a reduced arm opening angle. Extra pumping capacity is achieved through the installation of a second pump or enhancing redundancy by using only one pump. The Weir oil collecting chamber can also be replaced by a complete brush or belt conveyor skimmer cassette as mentioned above. All VOS and crane functions can also be operated wirelessly if required.

## ENQUIRIES

Websites: [www.ro-cleandesmi.com](http://www.ro-cleandesmi.com) and [www.koseq.com](http://www.koseq.com)