

Innovative hydraulic hose integrated into Lamor's oil recovery system

The globally operating Lamor Corporation supplies demanding oil spill response and recovery systems for both the private and the public sector. In collaboration with Lamor, PMC Polarteknik has developed a new hosing solution and a hydraulic power source for Lamor's oil recovery system. The innovative system minimises environmental damage in case of an oil spill.

Lamor uses the hose system for emergency drainage, oil transfer and for operational control of oil collectors. An emergency drainage is done if, for instance, an oil tanker runs aground and its fuel and oil tanks have to be emptied. This way, the contents of the tanks won't spill over into the water.

Lamor Corporation's COO and Head of R&D **Rune Högström** compliments PMC Polarteknik for excellent collaboration. For an international conglomerate such as Lamor, finding key partners is vital.

– Combining quality, performance, reliability and efficiency in our industry is challenging yet rewarding when the results are remarkable, and this PMC Polarteknik delivered, Högström notes.

Lamor offers contingency planning, risk assessments, equipment maintenance and service coupled with training. The company has many decades' worth of experience in the oil spillage recovery field, and has this way grown into one of the leading operators in its sector.

A disaster led to an idea

The idea of a hose and reel system emerged in 2010, as Lamor was fixing a massive oil leak on the Gulf of Mexico. Lamor turned to PMC Polarteknik for help, which then supplied hoses for the recovery process. The result of cooperation was Umbilical Hose Reel system that was also tailored to fit Lamor's equipment. PMC Polarteknik's 40-meter hydraulic hose was an integral part of the new product.

– The goals Lamor set for us have been quite a challenge as well as an interesting opportunity. First we designed the hose solution suitable to the system. When the hoses were tested and deemed suitable, we started manufacturing them in even longer versions. The longer you can make a hose, the better. Now there are as long as 75-meter hoses in production, says **Tapani Savolainen**, who is in charge of the development project.



The remarkable thing about the oil recovery hoses is that they are inside a floating material, the outer surface of which is fortified to stand the hard weather conditions, oil as well as wear and tear. Also, the solution comes equipped with all components needed in recovery and oil transfer. Thanks to the telescopic extension arm, the hosing or collector are operable during emergency drainage by one person only, as well.

The power source is a solution for the future

PMC Polarteknik and Lamor's collaboration has also brought about a Modular Control and Power System unit that is attachable to the hydraulic hose. The system in question is the Lamor Power Pack (eLLP 55-80), which produces the power required to operate the pumps, engines and other hydraulics equipment within the oil recovery system. PMC Polarteknik is responsible for designing and manufacturing the equipment.

– The Lamor Power Pack introduces direct intelligent communications between the diesel engine and hydraulics system synchronizing all functions, Savolainen explains the operating principle.

The product represents advanced ecological thinking: it is on only when needed and moreover, the tank technology solution developed by PMC Polarteknik enables significant reduction in hydraulics oil use. This means that the structure of the equipment is markedly smaller and lighter and its maintenance easy. Also, the unit is globally trackable, remote controlled and remote monitored. The Power Pack is modularly designed and is made of reliable PMC Group-supplied hydraulics components and modular control system.

– Our eLPP coupled with the PMC Polarteknik's technology certainly does qualify as a world-class power pack that packs a punch effectively and reliably that is also efficient, says Högström.

Lamor is among the top oil recovery companies in the world. It has taken part in oil spillage control activities in, among others, Kuwait during the Gulf war as well as in Estonia and the Gulf of Mexico in 2010. In 2012, Lamor won the competitive bidding process organised by the state of Qatar. The contract involved the operation and maintenance of oil spillage recovery equipment by a local collaboration partner.

Lamor Corporation Ab.

Lamor stands for Larsen Marine Oil Recovery

Offers oil response and spill recovery solutions

Founded in 1982 in Finland

Has sold equipment to more than 120 countries

Has agent and distributor networks in over 90 countries

Solutions offered are designed to protect the environment and the ecosystem

Among collaboration partners are for example The Swedish Coast Guard, North American authorities, EU's environmental management parties

