

Edison, has recently modernized the process on the Vega platform according to the new regulation. The new regulation is the minimum distance for a oil tanker to be from the main extraction platform. Once anchored the oil can be safely transferred to the vessel from the mooring. The mooring is directly connected to the platform at a safe distance of 1.5 miles.

The FSO (Leonis) is able to attach directly onto the mooring system and it is able to transfer the oil constantly even in in harsh sea conditions. The vessel is able to rotate around this pivot point and the arm is able to move up and down in accordance with the wave movements.

### Analysis of the lubrication system

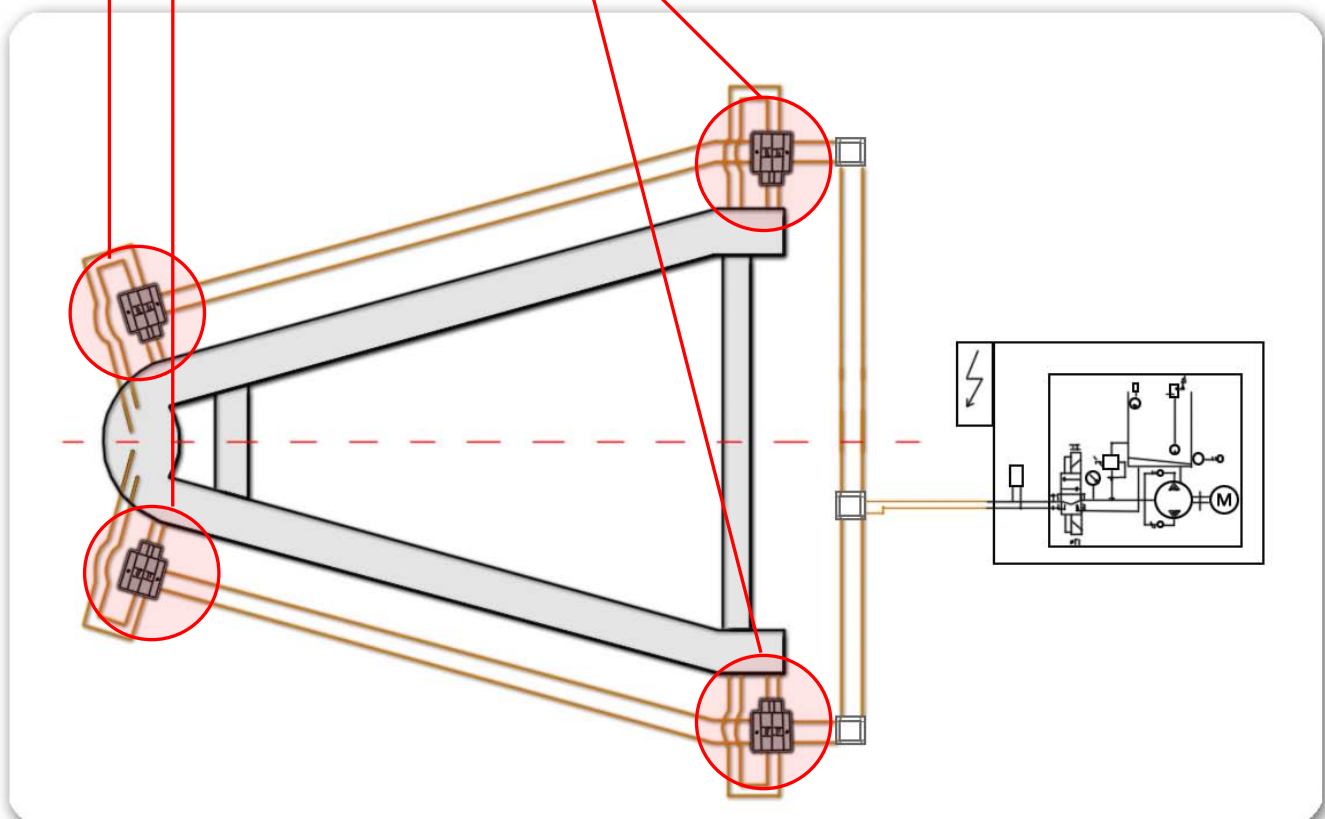
There are 16 points in total of this system. DropsA installed 4 dual line dividers. One on each of the corners which attach to the ship.



A further 2 are placed at the point where it attaches to the mooring.

Due to the hazardous area to which the lubrication system would be working in , DropsA suggested an ATEX sumo pump with ATEX dual line dividers in Stainless Steel.

*The position of the dual line blocks can be seen in the following diagram and photo.*



### DropsA proposed:

#### ▪ SUMO

- High output and pressure make large extended systems possible:- 400cm<sup>3</sup>/min (24cu. in), 2x200 cm<sup>3</sup>/min Modules, 400 Bar (5880 psi)
- Electrical dual line inverter integrates directly onto outlet
- Handles Grease NLGI 2 for extreme pressure

#### ▪ Dual Line divider (DMX)

DropsA dual line divider allows to maintain a correct distribution of grease on each point. They are suitable for Atex and marine Environment in fact they are certified and made in SS316

#### ▪ Refilling pump

DropsA pneumatic refilling pump allows for safe refill on the main SUMO pump. It is essential to use a good quality pump so that air is not introduced into the system. Available in 12.5 , 25 and 50 KG sizes.

**Sumo Pump**



**Drum pump**



**Dual line divider**