

## 130 m Megayacht

### Briefing

ACO Marine was assigned with engineering, design, manufacturing and delivery of the complete waste water treatment system. The system consists of a black and grey water collection system, transfer system and grease separation system and final treatment system. All systems must be of the highest technical, design and reliability level.



### Vessel description and assignment

Exclusive, 130 meter (315 ft) long yacht of the highest standard possible. The name, owner and shipbuilder are not disclosed. Assignment is very demanding in terms of performance, absolute reliability and footprint size of recommended equipment. Total requested capacity was 40,8 m<sup>3</sup> per day with 100% redundancy.

### Proposed solution

- Two off ACO Maripur 200 units complete with mounted grey water transfer system
- Centralised Black Water Vacuum Transfer station
- Collection Tank Aeration System
- Lipomat NS7 automated grease and sludge separation system complete with lift station and grease/sludge pumping units

### Capacity (based on project specific details)

Nr of Equivalent Inhabitants ..... 136 PE  
 Total volume of treated water ..... 46 m<sup>3</sup> each unit  
 Total volume of treated grey water ..... 37.4 m<sup>3</sup>

### Effluent water quality

#### Effluent values and its comparison with alternative standards

	IMO MEPC.2 (VI)	USCG 33CFR 159 PT1-300	USCG/Alaska 33CFR 159.309	IMO MEPC 159(55)	ACO Maripur® IMO certified values
<b>Coliform bacteria</b> [n/100ml]	200	200	20	100	9
<b>Total suspended solids</b> [mg/l]	100	150	30	35 (70 at sea)	2
<b>BOD5</b> [mg/l]	50	-	30	25	3
<b>COD</b> [mg/l]	-	-	-	125	45