# ACO Marine Lipator

# Grease Separator System NS2 - NS25 AISI 316L

ACO Marine Grease Separators are proven products for Fats, Oil and Greases (FOG) removal from Galley water. Galley water must first pass through a Grease Separator unit before entering any membrane wastewater treatmant plant as FOG 's can have an averse effect on membrane performance and life expectancy.

## Operating principles

By locating the inlet and outlets slightly above the separation chamber the resulting small hydrostatic pressure makes ACO Marine Lipator Grease Separator the only units of their kind whose separation efficiency is completely unaffected by vessels movement and vibration. The grease accumulates in the upper cone whilst the sediment drops to the lower cone.

The heating element located in the upper cone ensures the grease remains liquid. Clean water passes freely and continuously through the grease separator. Accumulated sediment and grease is drained to independent collecting barrels.

Grease and Sediment lift pumps as well as treated water lift station, can alse be integrated into the system depending on installation requirements aboard the vessel.



### Advantages

- Small hydrostatic pressure with no free surface ensures that the separation process is unaffected by vessel movement and vibration
- The ACO patented internal design ensures flow velocity profiles through the separation chamber produce effective separation of grease and sediments even during periods of high demand
- Grease and sediment removal is either fully automated (RA version) or manual (RM version)
- RA version is equipped with pneumatic valves and compressor, barrel level sensors and automatic filling device
- No operator contact with grease and sediments
- Grease and sediment removal occurs without interrupting separator operation. No process down-time.
- The separation technology ensures the greases and sediments are highly concentrated, only grease and sediments are disposed of with no surplus water; so often the case in conventional static systems
- Effective heating and short residence time within the separation chamber ensures that no grease is deposited on the chamber walls. Internal maintenance and cleaning is therefore reduced to an annual inspection only.
- Resistant to high temperatures
- Hygienic material Stainless steel 316
- Rigid construction to withstand vessel movement and vibration
- Both RA and RM versions are equipped with grease probe for indication of high concentration of grease inside of the unit

#### ACO Product benefits

- Demand-actuated disposal possible
- Reduction of disposal costs through targeted drawing-off of grease and sludge
- Class A1 material (stainless steel grade 316) and thus not flammable
- Fresh grease separator system as per DIN EN 1825 and DIN 4040
- For installation in frost-free environment
- With integrated sludge trap
- Housing and lower section made of stainless steel, material grade 316
- Heating cartridge
- Manual ball valve DN 50 for grease and sludge draw-off for RM version
- Barrels for grease and sediment sludge Contents: 60 l
- Cover includes hose attachment
- Agitating device with 1-phase alternating, current motor in upper housing
- Control of agitating device
- Local control with group fault reporting for central technical supervision



### Product information RM version



Nominal capacity	Nominal diameter	Dimensions						Total	Largest single component		Total Wieght	
		OD	L	В	Н	H1	H2	content	Diamerer x Height	Heaviest component	Empty	Full
(NS)	DN	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[1]	[mm]	[kg]	[kg]	[kg]
NS 2	100	114.3	1184	1206	1800	1306	1236	220	750 x 880	50	220	440
NS 4	100	114.3	1568	1358	1900	1400	1330	480	980 x 445	45	260	760
NS 10	150	168.3	2826	1885	2320	1800	1730	1770	1500 x 650	95	370	1770
NS 20	200	219	2043	2145	2349	1900	1830	2020	1750 x 775	120	430	2450
NS 25	200	219	2043	2145	2349	2000	1930	2260	1750 x 775	120	430	2710

Note: No standards for RA version available, project specific design available on request.