

# ACO Lipatomat/Lipator

## Grease Separator System NS4 - NS25 PE-HD

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 treatment plant as FOG's can have an adverse 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 Lipator and Lipatomat Grease Separators 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 fitted with level sensors which provide indication to the operator when they need to be emptied or replaced with exchange units.

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



#### Additional for Lipatomat:

- Pneumatic ball valve DN 50 for grease and sludge draw-off
- Measuring of grease layer thickness
- Filling device with magnetic valve to assist with sludge and grease discharge
- Compressor or alternative use of ship compressed air

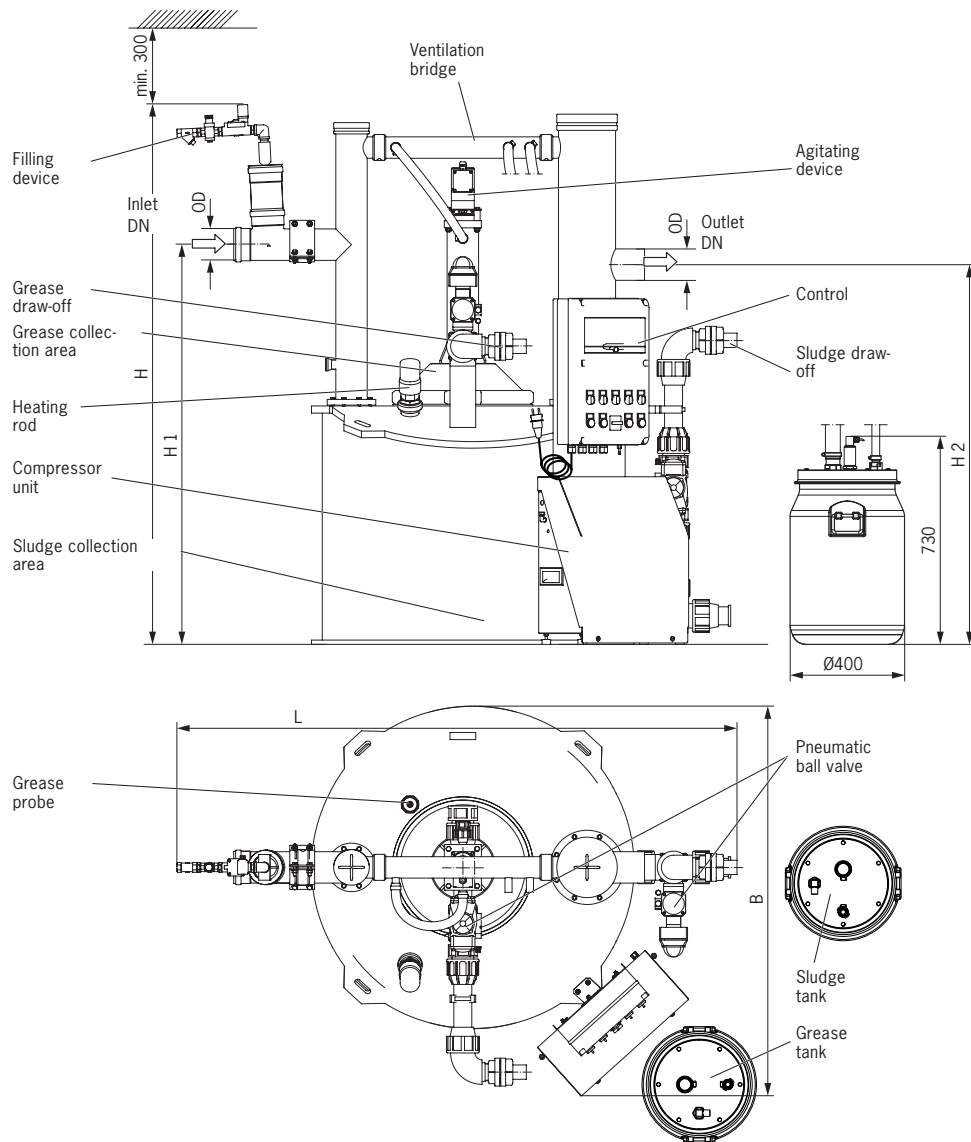
### Advantages

- 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 fully automated on the Lipatomat range (manual on the Lipator).
- 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 or PE-HD
- Rigid construction to withstand vessel movement and vibration
- Resistant to organic solvents

#### ACO Product benefits

- Demand-actuated disposal possible
  - Reduction of disposal costs through targeted drawing-off of grease and sludge
- 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 PE-HD
  - Heating cartridge
  - Manual ball valve DN 50 for grease and sludge draw-off
  - Barrels for grease and sediment sludge - Contents: 60 l
  - Cover includes hose attachment
  - Agitating device with 1-phase alternating current motor in lower housing
  - Control of agitating device
  - Measuring of drum filling level
  - Programme control with group fault reporting for central technical supervision

## Product information



Nominal capacity	Nominal diameter	Dimensions						Total content	Largest single component		Total Weight	
		OD	L	B	H	H1	H2		Diameter x Height	Heaviest component	Empty	Full
(NS)	DN	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[l]	[mm]	[kg]	[kg]	[kg]
NS 4	100	110	1950	1350	1850	1400	1330	570	1130 x 835	80	240	810
NS 10	150	160	2500	1850	2320	1800	1730	1570	1660 x 630	120	380	1950
NS 20	200	200	2750	2050	2560	1900	1830	2250	1920 x 700	160	440	2690
NS 25	200	200	2750	2050	2660	2000	1930	2500	1920 x 700	160	470	2970