GESAB ENVIRONMENTAL SHIP EQUIPMENT

The ultimate low emission tankers operating with GESAB Catamiser technology.

The vessels are today operating:

- With NO_x levels well below the future coming IMO requirements scheduled to come into force 2016; below Tier III.
- With less CO_2 levels than conventional ships
- With less fuel consumption than conventional ships

This is achieved by catalyst NO_x reduction of main engine and all auxiliary engines onboard. Further there is a heat recovery system converting heat from **all** diesel exhaust gases to efficient thermal energy used for all kind of heating purpose onboard on the vessel. This makes conventional oil fired boiler unnecessary which means a reduction of 120 tonnes fuel consumption per year for this size of vessels (9000 to 15000dwt).

This means double environmental-friendly operation due to less fuel consumption and efficient emission reduction for the new reduced fuel consumption.

Summary of total emission reductions and fuel savings:

CO_2 due to less fuel consumption:
370 tonnes/year

NO_x due to SCR and Catamiser:
230 tonnes/year

Fuel savings due to stopped oil burner:
120 tonnes/year

Main engine system
Exhaust gases from main engine is led into a SCR reactor for NO_x reduction and further to an exhaust gas boiler (Economiser) for heat recovery and further to the silencer and out into free air. See picture below.

Auxiliary engine system
Exhaust gases from the auxiliary engines are led via a damper system to a common exhaust manifold pipe and further into the Catamiser. This unit is a combined SCR reactor / economizer which both reduces NO_x emissions and recover heat to the ships heating system. From the Catamiser the exhaust gases are led into a silencer and out into the free air. See picture below.

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