

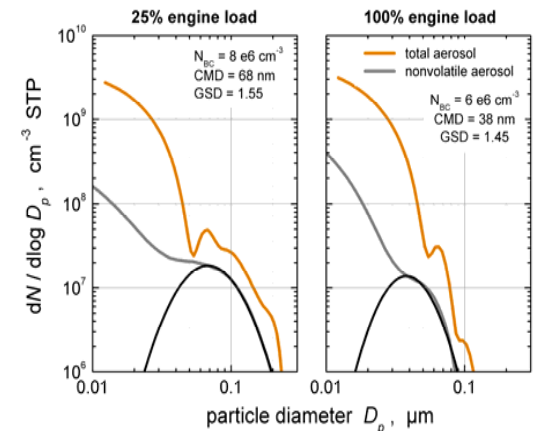
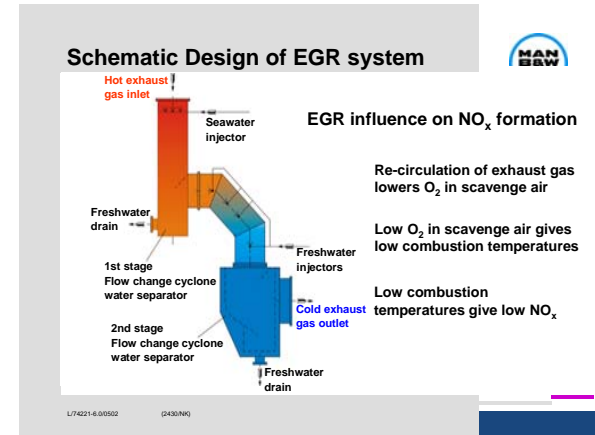
TASK 7.2: Emission reduction methods (internal – external – EGR)

Objectives

- EGR prototype system for 2-stroke marine diesel engine applicable to residual fuel oils
- Reduction of the NO_x emission of at least 50% without increasing other emissions especially CO_2 (fuel oil consumption)
- Characterization of particulate emission from marine engines
- Identification of influences of fuel oil quality on particulates

Highlights

- Design and manufacturing of various prototype EGR and Combustion Gas Re-circulation (CGR) systems for marine engines
- Measurements with different EGR and CGR setups were made on 4T50ME-X
- Sampling of reference particulate matter (PM) complete
- Measurements of PM number size distribution complete



PM number size distribution with volatility analysis for two different loads for HFO

