

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

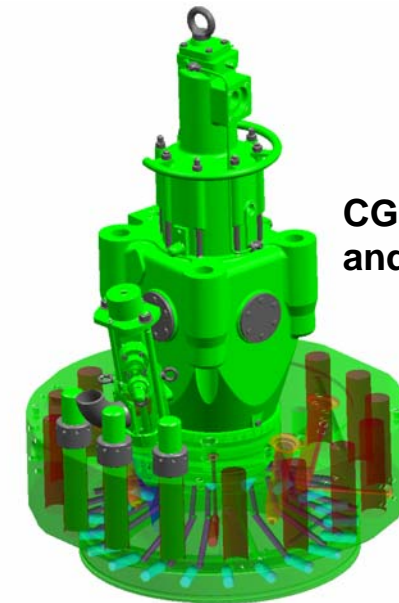
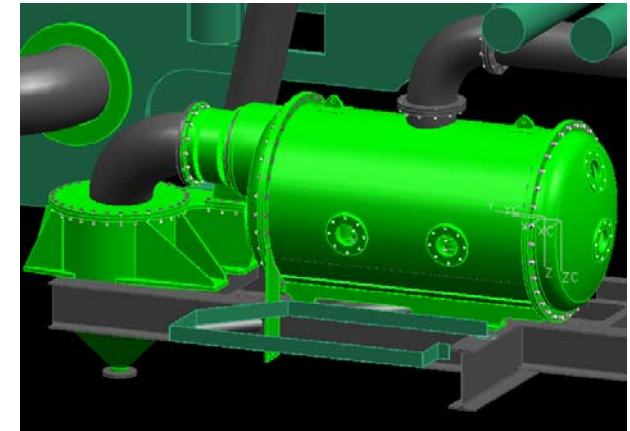
Objectives

- EGR prototype system for 2-stroke marine diesel engine applicable to residual fuel oils
- Reduction of the NO_x emission of at least 50% with out increasing other emissions especially CO₂ (fuel oil consumption)
- Characterization of particulate emission from marine engines
- Identification of influence parameters 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
- Optimized engine for low OC emission specified; final tests probably end of October 2006

3D design of the new scrubber system



CGR valve and cover

Partners:

