



Contribution ID: 158

Type: Paper

soot Particle filter for cruise ship

The paper I'd like to present will show the latest frontier in terms of exhaust after treatment for 4 stroke engines used mainly in cruise and commercial ships. The paper will collect the latest achievement obtained in the EU financed project: Leanships, where HUG, together with Fincantieri as technical partner, is developing a Demo Scale unit representative of a very innovative diesel particle filter designed to eliminate soot, Carbon and solid residual coming from engines when they operate with Heavy Fuel Oil. Hug is developing an affordable solution for these problems. The paper will present the solution as designed to solve the main problems: removal of the ash build-up on the filter wall, regeneration of the soot-carbon with an acceptable energy consumption, introducing a new concept for isolation of single filter sections for regeneration and ash extraction. It will be presented. The prototype consistently in a basic unit for demonstration purposes, complete with all necessary devices to represent the full scale system, but with a reduced area and volume, approximately suitable for about 200 / 500kW instead of 10MW target engine. The test bed is finalized on the basis of the results progressively achieved during the EU Leanship project.

Primary author: BERTOGLIO, carlo andrea (Hug Engineering Italia)

Co-author: KILCHSPERGER, roland (Hug Engineering Ag)

Presenter: BERTOGLIO, carlo andrea (Hug Engineering Italia)

Track Classification: Ship propulsion, machinery and systems