

DIESEL ENGINE CONDITION MONITORING DUE TO DIFFERENT OPERATION AREAS

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Abstract. When a ship design is developed, its engines are installed accordingly the owner requisites and the environment conditions in the designated operation area. Usually they are not adapted to sail all over the world. This implies that in some cases the power output cannot be the same for the safety of the engine. If a engine was conceived to operate on 16°C of ocean sea, when it navigates on a 36°C ocean, the engine power must be limited in order to not provoke major damage. Due to the fact, in this study two diesel engines will be monitor with online data collection and statistical treatment. The statistic treatment will be with the univariate control charts. With the engines operating on a range of ocean temperatures from 16°C to 36°C, the power limitation and the systems must be flexible due the use of the engines and consequently the use of the ships over sea.

Keywords: Diesel Engine, Environment Conditions, Condition Monitoring