ABSTRACT
The study mainly analyzed the solution of the current shipping diesel engine with low-quality fuel, including how the background of low-quality fuel, the fuel characteristics, the fuel combustion and process influenced the shipping engine efficiency. There were real tests to prove that the navigational efficiency was getting lower with the use of low-quality fuel. Maintenance would cost more and the brake horse power wouldn't work well. In terms of solving the problems with the use of the low-quality fuel, the study concluded some treatments before using the poor fuel: heating, filtering and purifying. Then control the viscosity and improve the equipment. The main engine could work better and increase injection pressure and air temperature under low-load running in order to maintain better combustion characteristics, which can lower the navigation cost and foster the energy-saving efficiency.

Keywords : Low quality fuel, Purifying oil, Control the Viscosity

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REFERENCES
[1] 船用內燃機 鄭文和 編著
[2] 船舶柴油引擎使用低品質燃油之燃燒特性 呂建宗 研究論文
[3] 燃料油•潤滑油•實務 佐藤宗男、富田正久、礦山淳二 共著
[4] 燃料油•潤滑油 西山善忠 著
[5] 輪機實務與安全 楊仲仁 著
[6] 燃料與燃燒 詹德隆 編著
[7] SULZER 廠柴油主機修護手冊
[8] 最新實用重柴油機精華 郭錦榮 編著
[9] 船舶重柴油機實務 章義秀 著
[10] 內燃機概論 蕭業儒 著