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The study on performance of naturally aspirated spark ignition engine equipped with waste heat recovery mechanism (Article)

Herawan, S.G.^a ✉, Rohhaizan, A.H.^a, Ismail, A.F.^b, Shamsudin, S.A.^a 👤

^aCentre for Advanced Research on Energy, Faculty of Mechanical Engineering, Universiti Teknikal Malaysia Melaka, Hang Tuah Jaya, Durian Tunggal, Malacca, Malaysia

^bDepartment of Mechanical Engineering, Faculty of Engineering, International Islamic University Malaysia (IIUM), Kuala Lumpur, Malaysia

Abstract

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The waste heat from exhaust gases represents a significant amount of thermal energy, which has conventionally been used for combined heating and power applications. This paper explores the performance of a naturally aspirated spark ignition engine equipped with waste heat recovery mechanism (WHRM). The amount of heat energy from exhaust is presented and the experimental test results suggest that the concept is thermodynamically feasible and could significantly enhance the system performance depending on the load applied to the engine. However, the existing of WHRM affects the performance of engine by slightly reducing the power. © 2006-2015 Asian Research Publishing Network (ARPN).

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