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(57) Abstract :

[06] A four stroke single cylinder I.C engine is selected for the experimentation of waste heat recovery from the exhaust gas temperature. Waste heat can be utilized for the heating purpose like preheating intake air and fuel, space heating, dryer etc. This paper includes the analysis of preheating intake air on emissions (CO, CO₂, HC and NO_x) and time required for fuel consumption. Engine exhaust gas temperature is used to preheat the inlet air, heat exchanger is used to transfer heat from exhaust gases to inlet air. Results show that on preheating the inlet air there is a considerable decrease in CO, HC and NO_x emissions. There are unaltered results obtained for CO₂ emissions. The time required for consumption of fuel increases considerably. Accompanied Drawing [FIG. 1] [FIG. 2] [FIG. 3] [FIG. 4] [FIG. 5] [FIG. 6]

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