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(57) Abstract :
The present invention relates to preparation of Injection model of diesel engine combustion the cylinder charge is assumed to be a homogeneous mixture of ideal gases at all times. The setup enables study of VCR engine performance for brake power, indicated power, frictional power, BMEP, IMEP, brake thermal efficiency, indicated thermal efficiency, Mechanical efficiency, volumetric efficiency, specific fuel consumption, A/F ratio and heat balance. The experiments are conducted for diesel fuel and jetropha biodiesel-diesel fuel blends with varying load of 0,3,6,9,12 kg. The purpose here is not to find the performance of the engine or its model at given various parameters, but to evaluate the performance of the model and compare it with the actual engine performance.

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