

MODELING THE HEAT TRANSFER IN THE PISTON HEAD OF A SPARK IGNITION ENGINE SUPPLIED WITH ETHANOL – GASOLINE BLEND

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ABSTRACT

The heat transfer processes in piston head engine can be modeled with a variety of methods. These methods range from simple thermal networks to multidimensional differential equation modeling.

The heat transfer in the combustion chamber of an internal combustion engine is determined mainly as a function of the level of temperature of the parts. Measuring the temperatures in different parts of the cylinder head and of the piston, we can adjust the cooling, or we can improve the materials, or even we can improve the properties of the fuels. When the engine is supplied with a blend of ethanol – gasoline the level of temperatures is different then in the case of supplying by gasoline.

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