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Svistula A.E. Efficiency of fuel double injection in the diesel engine / A.E. Svistula, G.D. Matievsky // Internal combustion engines. – 2010. – № 1. – P. 17-21.

The analysis is executed, and classification of ways of

fuel double injection in a diesel engine is given. Results of an

experimental research of two-single fuel injection in the diesel

engine with direct action fuel system of divided type are

given. Three levels of an initial portion of fuel are revealed,

they conform to a maximum of indicated efficiency, to increase

of fuel losses in a cylinder surface, to autoignition of a

preliminary portion. Optimum parameters of two-phase fuel

injection are determined, it is attained a reduction of the fuel

consumption - 4 %, speed of cylinder pressure increase - 25

%, the maximal combustion pressure - 10 %, emission of

nitric oxides - 40 %, soot - 30 %. Il. 5. Bibliogr. 5 names.