

UDC 621.436

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.