

UDC 621.43.016.4

Marchenko A.P. Experimental research of working process in the combustion chamber of internal-combustion engine with heat-insulated piston /A.P. Marchenko V.V.

Shpakovsky // Internal combustion engines. – 2010. – № 2.

– P. 49-53.

Results of comparative bench tests of diesel engine

4ChN12/14 with serial pistons and with pistons with corundum

layer on the bottom surface are presented. Influence of

partly dynamic heat insulation of the piston with rational

thickness of heat insulation corundum layer formed by galvanic-

plasma processing, on parameters of working process

in the combustion chamber of diesel engine 4ChN12/14 has

been investigated. As a result of the analysis of display

charts, charts of thermal emission speed, pressure increase

speed, gas temperature, the effect of a more effective utilization

of heat of the fuel combustion, which provides more

profitable work of a diesel engine, has been established. Il. 7.

Bibliogr. 7 names.