UDC 621.431

Zhukov V.A. Experimental and computational investigation of hydraulic resistance in cooling cavities of internal combustion engines / V.A. Zhukov, E.N. Nikolenko // Internal

combustion engines. – 2009. – № 1. – P. 71-75.

The model for computational modeling with description

of an experimental plant used for investigation of pressure

losses in the ICE liquid cooling system cavities has been presented.

The results of computational and experimental investigations

of hydraulic resistance in the out of jacket space of

internal combustion engine that prove the impact of liquid

composition and its properties on the value of hydraulic losses

have been given. It is shown that the introduction of composite

multifunctional additives contributes to the decrease of hydraulic

losses and power consumption required to drive the circulating

pumps of the liquid ICE cooling systems. The explanation

of the yielded effect has been given. Tаblе. 2. Il. 4. Bibliogr. 6

names.