UDC 621.43

Krajniuk A.I. The simulation model of the supercharging system with deep air cooling / A.I. Krajniuk, S.A. Аlohin,

S.V. Alekseev, A.A. Krajniuk // Internal combustion engines.

– 2010. – № 2. – P. 27-34.

The new principle of the organization of working process

of the combined supercharging system of Internal Combustion

Engine with the Cascade Pressure Exchanger has been described.

It allows to raise considerably the level of

forcing of the engine by supercharging at the expense of

expansion of effective air supply area and cooling of supercharging

air to temperature below an ambient without attraction

of additional mechanical energy on refrigeration cycle

realization. Substantive postulates of combined engine’s

working model have been stated. Some results of calculation

and experimental investigations of supercharging system of

the engine 6CHN12/14 have been adduced. Il.7. Bibliogr. 7

names.