STUDY OF THE FLOW THROUGH THE TURBOCOMPRESSOR OF SUPERCHARGED ENGINE

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Abstract. The paper presents the model of simulation for flow in the turbocompressor of supercharged Diesel engines MB836 Db. The computer programme which use the Ansys CFD software procedures and personal procedures allows to simulate the unsteady flow in the 3D geometry. The paper contains results, obtained in 3D geometry, impeller and diffuser canal with a part of winding chamber. Using the computer programme is possible to change the geometry, the initial and limiting conditions and also some procedures to simulate different cases of flow in complex 3D geometry, such as flow in turbomachines.

Keywords: turbocompressor, supercharged diesel engine, numerical simulation, unsteady flow

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