

*Univ. Assist. Flaviu Dinka, M. Sc.,
Prof. Dr. Virgiliu Dan Negrea, M. Sc.,
Technical University of Timisoara, Romania.*

EXPERIMENTAL RESEARCH REGARDING THE PRESSURE EVOLUTION IN THE CYLINDER AND THE SWIRL CHAMBER OF AN IDI DIESEL ENGINE

UDK: 621.436-222

The paper presents some experimental data concerning the pressure evolution in the cylinder and the swirl chamber of an IDI Diesel engine. The results have been obtained by the authors both for a suction and a supercharged engine. At the same time we deal with the pressure difference between the chambers and with the dynamic phenomena taking place in the cylinder, studying the way they are influenced by the engine speed and load.

Key words: diesel engine, swirl chamber, pressure, dynamic phenomena.

EKSPERIMENTALNA ISTRAŽIVANJA VEZANA ZA PRITISAK U CILINDRU I KOMORI ZA SAGOREVANJE DIZEL MOTORA

U radu su dati rezultati merenja pritiska i vrtloga u komori za sagorevanje komornih dizel motora. Rezultati su dobijeni za motore sa normalnim usisavanjem i nadpunjene motore. Istovremeno, prikazana je i razlika pritiska između komora ova dva motora kao i dinamički fenomen prostiranja pritiska u cilindru uzimajući u obzir uticaj broja obrtaja i opterećenja motora.

Ključne reči: dizel motor, komora za sagorevanje, pritisak, dinamički fenomen.