





**AUTOMOTIVE SERIES** 

## EXPERIMENTAL RESEARCHES REGARDING THE INFLUENCE OF THE NUMBERS OF NOZZLE HOLES UPON INJECTION PROCESS

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Abstract

The paper presents an experimental study regarding the influence of the numbers of nozzle holes upon the injection process. The injection equipment was mounted on a PALTEST test rig. Using the test rig and some specific devices we have measured the following parameters: maximum injection pressure, cyclic fuel delivery, injection time and the injection rate. Sauter mean diameter and spray penetration were calculated using specific formulas. The aim of that paper was the optimisation of the numbers of fuel spray to improve the working process of the injection equipment.

**Keywords** 

Injection process, sauter diameter, fuel spray