

SCIENTIFIC BULLETIN



AUTOMOTIVE SERIES

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RECHERCHE EXPERIMENTALE SUR LE POMPAGE DES COMPRESSEURS

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Abstract

Most of automotive diesel engines are turbocharged. Turbo charging is now currently applied on gasoline engine with height specific power output (downsizing). It is required for the compressor a large functioning area and sometimes unstable behaviour may occur which is unacceptable for the car driver (and generally for the engine). In this article is described the surge phenomena and how it appends. Our turbocharger test rig has been equipped to make experiments in surge area and measurements. First results are presented and commented.

Keywords

Turbo charging, downsizing, compressor, surge;