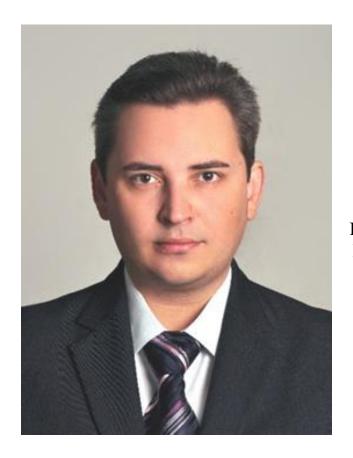
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## TO THE HISTORY OF THE INVENTION AND CREATION OF THE FIRST INTERNAL COMBUSTION ENGINES

## **Summary**

The article is devoted to the history of the invention and the creation of the first supercharged internal combustion engines. It is shown that the German designers Gottlieb Daimler and Rudolf Diesel stood at the origins of the creation of forced induction internal combustion engines. They were the first to attempt to use forced induction for internal combustion engines. However, the results of their experimental studies were unsuccessful and gave them reason to make a negative conclusion about the benefits of using forced induction in internal combustion engines.

Based on archival and literary sources, it was established that the well-known designer and inventor of Ukrainian origin Boris Loutzky was at the origins of the creation of forced induction internal combustion engines.

By order of the Naval Department of the Russian Empire, Boris Loutzky in 1901 developed a technical design for an oil two-stroke vertical in-line engine with supercharging for the destroyer «Vidny». In 1903 Boris Loutzky was awarded the Order of St. Stanislav for the invention of the supercharged oil engine. Boris Loutzky's forced induction method was widely used in Germany to create two-stroke oil engines with a capacity of 850, 1150 and 1650 hp. for submarines. In 1912, the Russian Naval Department ordered several two-stroke engines of the Loutzky design for Russian submarines from the German shipyard Friedrich Krupp company. However, due to the outbreak of World War I, these engines have not been sent to Russia, and have been established on the German submarine U-63-U-68.

Soviet designers widely used the Loutzky pressurization method when creating internal combustion engines. Academician A.A. Mikulin used it to create the AM-38 and AM-42 aircraft engines during World War II, and Academician I.A. Koval used it when creating engines for agricultural machinery, in particular for tractors DT-54, KhTZ-7, DT-14, DT-20, T-75, T-90, T-74 after the end of World War II.

**Keywords**: internal combustion engine, forced induction, history of invention, Boris Loutzky, Gottlieb Daimler, Rudolf Diesel