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THE PRACTICAL ASPECTS OF FOUR STROKE DIESEL ENGINES PRINCIPLE IN SIMULATION TASKS

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Abstract: This article discusses some of the practical issues of studying the basic principles of the four-stroke diesel engine operation.

Four-stroke cycle is logical and intuitive. All four obvious steps necessary to implement the full working cycle, there exist clearly: intake - compression - combustion - exhaust. On each of them assigned to a single stroke, i.e. moving the piston from the bottom dead center BDC to the top dead center TDC and vice versa. This principle was published for the first time by the French engineer of Alphonse Beau de Rochas in 1862 [1], - in thirty years prior to the well-known patent No. 67207 [2] of Rudolf Diesel which united in it ideas of many engineers of the XIX century.

Since then designs of four-cycle diesels considerably changed, but the general principle of operation remained the invariable.

Keywords: four-stroke diesel, engines, simulation tasks.

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