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Marchenko A.P. Hydrogen combustion analyze and modeling in the four-stroke one-cylinder spark ignition engine A.P. Marchenko, A.A. Osetrov, I.Dubej, R.Maamri //

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The article presents the results of hydrogen combustion analysis and modelling in the one-cylinder four-stroke spark ignition engine. The one-zoned mathematical model of combustion in basis I.I.Vibe's law is developed. It is shown, that hydrogen combustion speed changes under the law having the form, close to triangular. The analyse of influence of constructive and adjusting parameters on the indicate diagram is represented. Empirical equations for the parameter of dynamics and the duration of combustion in I.I.Vibe's law are offered. Tabl. 1. Il. 4. Bibliogr. 9 names.