DETERMINATION OF DETONATION WAVE VELOCITY IN AN EXPLOSIVE GAS MIXTURE

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Summary

The well-known formula for the flat detonation wave velocity derived from the Hugoniót system of equations faces difficulties, if being applied to a spherical reactor. A similar formula has been obtained in the framework of the theory of explosion in reacting gas media with the use of a special model describing the transition of an explosive wave in the detonation. The derived formula is very simple, being also more suitable for studying the limiting processes of volume detonation.