CALCULATION OF GAS DYNAMICS OF A MULTILAYER ALUMINUM TARGET

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The calculation was carried out for a target consisting of a set of identical aluminum foils spaced at the same distance in a vacuum. At the initial moment of time, the instantaneous identical energy input is specified in the foils. The calculation shows the formation of a binodal layer during the expansion of a single foil, caused by the isentrope break at the boundary of the two-phase region. By selecting the energy input and the ratio of the foil thickness and the gap between the foils, a solution is obtained in which the entire target substance after equalizing the pressure is in the two-phase region at one constant and sufficiently high temperature.