
Method of quick parameters estimation on the smooth blunt body surface with equilibrium physical and chemical conversion

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For quick estimation of pressure, density and velocity on the part of smooth blunt body surface, shock layer gas flow is modeling with help of froze adiabatic coefficient. Real air properties investment is calculated in equilibrium approximation on the shock wave using standard tables of thermodynamic air pressure and enthalpy functions. Calculation results using froze adiabatic coefficient and calculations of equilibrium gas flow in rigorous model gives the similar results. The method results applying to axisymmetric gas flows are considered in this article.

Keywords: *equilibrium gas flow, axisymmetric gas flows, sonic point.*

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