

# Numerical algorithm for modeling turbulence in a jet with diffusion combustion

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## Abstract:

The paper proposes a method for calculating the diffusion combustion of a propane-butane mixture in a turbulent jet using the "k-e" model of turbulence. For mathematical modeling of the combustion object, the equations of the theory of the boundary layer are used. The equations for the components of the gas mixture are reduced to one using the Schwab-Zeldovich function. The formulated system of partial differential equations with boundary conditions is solved numerically and its algorithm is implemented using the DELPHI graphical environment.

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