

عنوان مقاله:

Numerical Simulation of Opposing Jets Flow Using a Thermodynamically Consistent Turbulence Model

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خلاصه مقاله:

The opposing jets flows are widely used in different industrial applications, due to their specific characteristics, specially the very compact and highly turbulent zones in the impingement surface. As the turbulence, is not homogeneous and isotropic in this field, therefore, the usual RANS turbulence models are not successful in resolving the flow characteristics in these flows. The so-called thermodynamically consistent turbulence models, which complying the second law of thermodynamics, are one of the possible choices for conducting better simulations of opposing jets flows. The numerical results of one of these models are presented in this paper and are compared with the results of the common standard k- ϵ model. This comparative evolution shows the relative better capability of the consistent model related to nonconsistent one.

کلمات کلیدی:

Turbulence Modeling, Opposing Jets, Thermodynamically Consistent Turbulence Model, Entropy Inequality

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