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Ying Wu, Daoyin Liu, Jiliang Ma, Xiaoping Chen

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Effects of Gas-Solid Drag Model on Eulerian-Eulerian CFD Simulation of Coal Combustion in a Circulating Fluidized Bed

Ying Wu, Daoyin Liu, Jiliang Ma, Xiaoping Chen*

**Key Laboratory of Energy Thermal Conversion and Control of Ministry of
Education School of Energy and Environment, Southeast University, Nanjing
210096, P.R. China**

Tel: +86-25-8379-3453; Fax: +86-25-8379-3453; Email: xpchen@seu.edu.cn

Abstract

The Eulerian-Eulerian two fluid model (TFM) has been widely used to simulate the fluidized bed combustion/gasification process, where the dense gas-solid flow, heat and mass transfer, and various chemical reactions are coupled. Significance of the drag coefficient in determining the gas-solid flow characteristics is well known. However, effects of the drag coefficient on the overall performance of the fluidized bed combustion/gasification are not emphasized. In the present work, two widely

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