

عنوان مقاله:

CFD simulation of bed expansion for gas-solid tapered fluidized beds

محل انتشار:

سومین کنفرانس ملی کاربرد CFD در صنایع شیمیایی (سال: 1390)

تعداد صفحات اصل مقاله: 9

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خلاصه مقاله:

Knowledge of bed expansion, in gas-solid fluidization is of great importance in the design of fluidized bed reactors. In this study, the expansion of tapered fluidized beds were simulated using computational fluid dynamics (CFD). Different drag models overestimated the drag force for the different particles. CFD results showed that the drag model is an important hydrodynamics parameter for gas-fluidized beds and the Syamlal-O'Brien drag model simulated a bed expansion in agreement with the experimental data. Effects of static bed height and tapered angle on bed expansion .have been investigated numerically

کلمات کلیدی:Gas–solid fluidization, Tapered fluidized bed, Bed expansion, CFD

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