

عنوان مقاله:

CFD simulation of PVC Fluidized Bed Dryer Hydrodynamic

محل انتشار:

پنجمین کنگره بین المللی مهندسی شیمی (سال: 1386)

تعداد صفحات اصل مقاله: 3

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خلاصه مقاله:

In present study, CFD based simulation of industrial large scale PVC fluidized bed dryer of Bandar Imam Petrochemical Complex (BIPC) has been performed. The CFD model is based on Eulerian-Eulerian formulation. The governing equations were discretized by using finite volume method. The effects of parameters such as air inlet velocity, air distributor design; fluidized bed geometry and particle size distribution of PVC on fluidized bed dryer hydrodynamic was investigated. Afterward the air inlet velocity and air distributor design was optimized. The simulation results show that for better performance of operation and reduction of off grade PVC, the design of fluidized bed dryer must be improved.

کلمات کلیدی:

Fluidized bed dryer, CFD Simulation, Eulerian-Eulerian, PVC

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