عنوان مقاله:

Investigation of Some Effective Parameters on the Fluidized Bed Grain Dryers

محل انتشار:

فصلنامه انرژی و محیط زیست ایران, دوره 4, شماره 4 (سال: 1392)

تعداد صفحات اصل مقاله: 7

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خلاصه مقاله:

Having accurate values of the parameters which mainly govern the industrial processes in hand is the key aspect to handle the process and optimize it. To deal with this challenge, some mathematical modelshave been developed and modified to be epidemic. This Study aims to present the simulation of gas-solid flowin fluidized bed dryer. Numerical solution of two-dimensional, axis-symmetrical cylindrical model for both phases is the very base on which this study is conducted. Some of the versatile parameters like inlet gas velocity and temperature, diameter and density of particles during drying process went under magnification and also challenges of heat transfer along the bed are investigated and discussed in detail. Solid temperaturesin the center and on the surface which are greatly affected by time as well as results of the study are shown. At the end, model outputs are compared with experimental data which shows .reasonable agreement and good match

کلمات کلیدی: Gas-solid flow Fluidized bed Grain dryer Heat transfer Properties of wheat

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