عنوان مقاله:

a short review on spouted beds hydrodynamcis

محل انتشار:

هفتمین کنگره ملی مهندسی شیمی (سال: 1390)

تعداد صفحات اصل مقاله: 12

نویسندگان:

arezou niksiar - department of Chemical Engineering, amirkabir university of technology tehran iran

morteza sohrabi - department of Chemical Engineering, amirkabir university of technology tehran iran

amir rahimi - department of Chemical Engineering, faculty of engineering university of Isfahan Isfahan, Iran

خلاصه مقاله:

This study is performed to review previous experimental and theoretical investigations carried out on the area of hydrodynamic behavior of spouted beds. A number of experimental studies are introduced aimed to determine the flow patterns of gas and solid phases and/or to present empirical correlations for key parameters including the minimum spouting velocity, fountain height, spout radius, fluid and solid velocities, and drag force. In the present paper it has been shown that a pseudo-3D model (2D model applied for fluid phase and 3D model for solid phase) may be proper for simulation of spouted beds. However, there is still some shortage in employing an appropriate correlation for fluid-solid drag force. This study may help the researchers to recognize the applicability and weakness of the available models and to apply proper correlations

کلمات کلیدی:

spouted beds, hydrodynamic, discrete element method, eulerian method

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/340803

