DEM analysis of share flow of adhesive particles

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It was reported that the normal spring constant in the DEM (Discrete Element Method) model largely affects the fluidized behavior of adhesive particles, and a dynamic adhesion force model was proposed to express the fluidized behavior of adhesive particles by using a reduced spring constant, which is widely used to reduce the calculation time. In the present study, a validation of the dynamic adhesion force model was made by performing a numerical simulation of granular share flow.

Keywords: Granular share flow, Adhesion force, Modeling, Discrete Element Method