

◆ Model database

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Joint particles model database for discrete element numerical simulation

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Abstract: Particle flow calculation is an essential method for numerical simulation. Single spherical particles cannot meet the increasingly complex particle simulation requirements, and joint particles may simulate materials with different shapes. To ensure the consistency of simulation and actual materials, the gradation of the two materials needs to be the same. However, the premise is that the particle size of the joint particles is obtained by calculation. It is very cumbersome for researchers to form particles and calculate the particle size when calculating joint particles. This problem can be solved by building a particle database. This paper establishes this database, and parameters such as particle size and area of joint particles are calculated. It dramatically simplifies the workload of joint particle simulation personnel and can compare simulation results of different researchers, which is beneficial to the promotion of research results.

Keywords: joint particle, particle size, discrete element, database



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