



POWDER RAKING in Additive Manufacturing

Know How Video

EDEM: Simulation of the Powder Raking Process in Additive Manufacturing

Edited by on 23. Oct. 2023

This simulation models over 8 million particles of less than 0.3mm in size. Large amounts of tiny particles are common in Additive Manufacturing applications. This video shows powder raking and how EDEM tools can be used to analyze voidage, particle orientation and number of contacts at different time steps. Similar simulations can guide the design and optimization of the powder rake and its speed. <https://www.youtube.com/watch?v=UxAlfiEMsFI>

EDEM software is used in numerous industries to simulate the behavior of a wide range of bulk and granular materials, including powder processes. It has potential to be applied to various aspects of the Additive Manufacturing process, including powder delivery, spreading, and cleaning operations.