Record Nr. UNINA9910411653303321 Autore Ortega-Rivas Enrique Titolo Unit operations of particulate solids: theory and practice //Enrique Ortega-Rivas Pubbl/distr/stampa Boca Raton, Fla., : CRC Press, c2012 Boca Raton, Fla.:,: CRC Press,, 2012 **ISBN** 1-000-21887-2 0-429-11047-2 1-283-27955-X 9786613279552 1-4398-4909-9 Edizione [1st ed.] Descrizione fisica 1 online resource (476 p.) Classificazione SCI013060TEC012000 Disciplina 620/.43 620.43 Soggetti **Powders** Chemical processes Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references. Nota di bibliografia pt. 1. Characterization of particulate systems and relation to storage Nota di contenuto and conveying -- pt. 2. Bulk solids processing -- pt. 3. Separation techniques for particulate solids. Suitable for practicing engineers and engineers in training, Unit Sommario/riassunto Operations of Particulate Solids: Theory and Practice presents the unit operations in chemical engineering that involve the handling and processing of particulate solids. The first part of the book analyzes primary and secondary properties of particles and particulate systems, focusing on their characterization and the effects on selection and design of silos and conveyors. Covering the main industrial operations of dry solids processing, the second part offers insight into the operation principles of the most important technologies that handle dry solids in bulk. With an emphasis on two-phase and multiphase flow, the final part describes all of the relevant systems in industrial processes that combine two different components of the state of

matter as well as technologies for separating phases by purely

mechanical means. Through clear explanations of theoretical principles and practical laboratory exercises, this book provides an understanding of the behavior of powders and pulverized systems. It also helps readers develop skills for operating, optimizing, and innovating particle processing technologies and machinery in order to carry out industrial operations, such as centrifugation, filtration, and membrane separations--