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Titolo Unit Operations of Particulate Solids : Theory and Practice / / Enrique

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Nota di contenuto Characterization of Particulate Systems and Relation to Storage and

Conveying: Introduction. Bulk Solids: Properties and Characterization. Storage and Conveying of Bulk Solids. Bulk Solids Processing: Size Reduction. Size Enlargement. Mixing. Fluidization. Separation

Techniques for Particulate Solids: Introductory Aspects. Solid Mixtures.

Solid-Fluid Systems. Appendices. Index.

Sommario/riassunto Suitable for practicing engineers and engineers in training, Unit

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,

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

the final part describes all of the relevant systems in industrial

processing technologies and machinery in order to carry out industrial

operations, such as centrifugation, filtration, and membrane separations"--Provided by publisher.