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TROUBLESHOOTING OF AGGLOMERATION SYSTEMS AND PLANTS Tumble/Growth Technologies Pressure Agglomeration Technologies Other Technologies -- APPLICATIONS OF AGGLOMERATION PHENOMENA FOR SINGLE PARTICLES AND IN NANO-TECHNOLOGIES OUTLOOK BIBLIOGRAPHY -- List of Books or Major Chapters on Agglomeration and Related Subjects References Author's Biography, Patents, and Publications Tables of Content of related Books by the Author -- GLOSSARY OF APPLICATION-RELATED TERMS ASSOCIATED WITH AGGLOMERATION LIST OF VENDORS.

Sommario/riassunto

Agglomeration is integral to the processes of modification of powders, production of composites and creation of new materials which are required in pharmaceuticals, foods, chemicals, fertilizers and agrochemicals, minerals, ceramics, metallurgy and all material producing industries. The binding mechanisms and the particle behavior as well as the characteristics of the processes and the resulting agglomerates are the same whether they are occurring in the 'ultra-clean' pharmaceutical or food industries or in 'dirty' minerals or waste processing plants. The work is a complete and up-to-date practical guide describing the various agglomeration phenomena and industrial techniques for size enlargement. In addition to introducing the properties of agglomerates and the characteristics of the different methods, descriptions of the machinery and discussions of specific equipment features are the main topics. Furthermore, the book emphasizes recent developments at the level of single particles and applications of agglomeration phenomena in nanotechnology. The detailed evaluation of the subject is based on the authors experience as student, researcher, teacher, developer, designer, vendor, and user as well as expert and consultant in the field of agglomeration, its technologies and products, and is complemented by the know-how of colleagues who are active in specific areas and information from vendors. It is intended for everybody working in industries that process and handle particulate solids as it aims to help understand and control unwanted agglomeration as well as use, improve, and develop methods for the beneficial size enlargement by agglomeration.