

1. Record Nr.	UNINA9910831179603321
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Titolo	Agglomeration: Processes and Industrial Applications
Pubbl/distr/stampa	[Place of publication not identified], : John Wiley & Sons Incorporated, 2007
ISBN	3-527-61978-X
Descrizione fisica	1 online resource (1456 pages)
Disciplina	660.284
Soggetti	Agglomeration
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	VOLUME 1 Introduction A Short History of Agglomeration Agglomeration as a Generic, Independent, and Interdisciplinary Field of Science Glossary of Agglomeration Terms Agglomeration Theories Agglomeration Technologies Tumble/Growth Agglomeration Pressure Agglomeration Agglomeration by Heat/Sintering Special Technologies Using the Binding Mechanisms of Agglomeration Engineering Criteria, Development, and Plant Operation Outlook Indexes: List of Vendors, Wordfinder Index, Subject Index -- VOLUMES 2 and 3 INTRODUCTION AGGLOMERATION AS A GENERIC, INDEPENDENT, AND INTERDISCIPLINARY FIELD OF SCIENCE AGGLOMERATION FUNDAMENTALS UNDESIRE AGGLOMERATION: -METHODS TO AVOID OR LESSEN ITS EFFECT BENEFICIAL USE OF AGGLOMERATION: - AGGLOMERATION TECHNOLOGIES AND METHODS INDUSTRIAL APPLICATIONS OF SIZE ENLARGEMENT BY AGGLOMERATION -- General Applications Pharmaceutical Applications Applications in the Chemical Industry Applications in the Food Industry Applications for Animal Feeds Fertilizers and Agrochemicals Building Materials and Ceramics Applications in the Mining Industry (Minerals and Ores) Applications in the Metallurgical Industry Applications for Solid Fuels Special Applications -- POWDER METALLURGY APPLICATIONS IN ENVIRONMENTAL CONTROL -- Collection, Stabilization, and Deposit of Particulate Solids Recycling/ Secondary Raw Materials -- DEVELOPMENT OF INDUSTRIAL APPLICATIONS Test Facilities Tolling Operations - Contract Manufacturing Scale-up -- OPTIMIZATION AND

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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.
