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8 Pressure Agglomeration 8.1 Mechanisms of Pressure Agglomeration; 8.2 Structure of Pressure Agglomerates; 8.3 Post-treatment Methods; 8.4 Pressure Agglomeration Technologies; 8.4.1 Low-Pressure Agglomeration; 8.4.2 Medium-Pressure Agglomeration/Pelleting; 8.4.3 High-pressure Agglomeration; 8.4.4 Isostatic Pressing; 9 Agglomeration by Heat/Sintering; 9.1 Mechanisms of Sintering; 9.2 Sintering Technologies; 9.2.1 Batch Sintering; 9.2.2 Continuous Sintering; 10 Special Technologies Using the Binding Mechanisms of Agglomeration; 10.1 Coating; 10.2 Separation Technologies 10.2.1 Gas/Solid Separation 10.2.2 Liquid/Solid Separation; 10.3 Fiber Technologies; 11 Engineering Criteria, Development, and Plant Design; 11.1 Preselection of the Most Suitable Agglomeration Process for a Specific Task; 11.2 Laboratory Equipment, Testing, and Scale-Up; 11.3 Peripheral Equipment; 12 Outlook; 13 Bibliography; 13.1 List of Books or Major Chapters on Agglomeration and Related Subject; 13.2 References; 13.3 Author's Biography, Patents, and Publications; 13.4 Tables of Contents of Related Books by the Author; 14 Indexes; 14.1 List of Vendors; 14.2 Wordfinder Index 14.3 Subject Index

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 book introduces the interdiscipl
