

1. Record Nr.	UNISA996217457103316
Titolo	Jornal de sciencias mathematicas e astronomicas
Pubbl/distr/stampa	Coimbra, 1877-1889
Descrizione fisica	Online-Ressource
Disciplina	510 520
Soggetti	Zeitschrift
Lingua di pubblicazione	Portoghese
Formato	Materiale a stampa
Livello bibliografico	Periodico
2. Record Nr.	UNINA9911006863103321
Titolo	Fluidization, solids handling, and processing : industrial applications / / edited by Wen-Ching Yang
Pubbl/distr/stampa	Westwood, N.J., : Noyes Publications, 1999
ISBN	9786612769498 0-08-094663-1 1-282-76949-9 1-282-00245-7 9786612002458 0-8155-1723-8
Descrizione fisica	1 online resource (909 p.)
Altri autori (Persone)	YangWen-ching <1939->
Disciplina	660/.284292
Soggetti	Fluidization Bulk solids flow
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.

Front Cover; Fluidization Solids Handling and Processing: Industrial Applications; Copyright Page; Contents; Chapter 1. Fluidized Bed Scale-up; 1.0 INTRODUCTION; 2.0 REACTOR MODELING: BED DIAMETER INFLUENCE; 3.0 INFLUENCE OF BED DIAMETER ON HYDRODYNAMICS; 4.0 EXPERIMENTAL MEANS TO ACCOUNT FOR SCALE-UP: USE OF SCALE MODELS; 5.0 SIMPLIFIED SCALING RELATIONSHIPS; 6.0 FURTHER SIMPLIFICATIONS IN THE SCALING RELATIONSHIP; 7.0 DESIGN OF SCALE MODELS; 8.0 EXPERIMENTAL VERIFICATION OF SCALING LAWS FOR BUBBLING BEDS; 9.0 APPLICATIONS OF SCALING TO COMMERCIAL BUBBLING FLUIDIZED BED UNITS  
10.0 HYDRODYNAMIC SCALING OF CIRCULATING BEDS  
11.0 CONCLUSIONS; ACKNOWLEDGMENTS; NOTATIONS; REFERENCES; Chapter 2. Pressure and Temperature Effects in Fluid-Particle Systems; 1.0 INTRODUCTION; NOTATIONS; REFERENCES; Chapter 3. Heat Transfer in Fluidized Beds; 1.0 INTRODUCTION; 2.0 BUBBLING DENSE FLUIDIZATION; 3.0 CIRCULATING FAST FLUIDIZATION; NOTATIONS; REFERENCES; Chapter 4. Gas Distributor and Plenum Design in Fluidized Beds; 1.0 INTRODUCTION; 2.0 TYPES OF GRIDS; 3.0 GRID DESIGN CRITERIA; 4.0 PARTICLE ATTRITION AT GRIDS; 5.0 EROSION; 6.0 EFFECTS OF TEMPERATURE AND PRESSURE  
7.0 PLENUM DESIGN  
8.0 DESIGN EXAMPLES; NOTATIONS; REFERENCES; Chapter 5. Engineering and Applications of Recirculating and Jetting Fluidized Beds; 1.0 INTRODUCTION; 2.0 RECIRCULATING FLUIDIZED BEDS WITH A DRAFT TUBE; 3.0 JETTING FLUIDIZED BEDS; NOTATIONS; REFERENCES; Chapter 6. Fluidized Bed Coating and Granulation; 1.0 INTRODUCTION; 2.0 COATING OF PARTICLES IN FLUIDIZED BEDS; 3.0 GRANULATION OF FINE POWDERS IN FLUIDIZED BEDS; ACKNOWLEDGMENT; NOTATIONS; REFERENCES; Chapter 7. Attrition in Fluidized Beds and Pneumatic Conveying Lines; 1.0 INTRODUCTION; 2.0 FACTORS AFFECTING ATTRITION  
3.0 ASSESSMENT OF ATTRITION  
4.0 ATTRITION TESTS; 5.0 ATTRITION IN FLUIDIZED BED SYSTEMS; 6.0 ATTRITION IN PNEUMATIC CONVEYING LINES; NOTATIONS; REFERENCES; Chapter 8. Bubbleless Fluidization; 1.0 INTRODUCTION; 2.0 FLUIDIZED LEACHING AND WASHING; 3.0 BUBBLELESS GAS/SOLID CONTACTING; 4.0 DILUTE RAINING FLUIDIZATION; 5.0 FAST FLUIDIZATION; 6.0 SHALLOW FLUID BEDS; 7.0 FLUIDIZATION WITH NO NET FLUID FLOW; 8.0 PARTICLES WHICH QUALIFY FOR BUBBLELESS OPERATION; 9.0 WHY BUBBLING AND NOT PARTICULATE FLUIDIZATION; 10.0 EPILOGUE; NOTATIONS; REFERENCES  
Chapter 9. Industrial Applications of Three-Phase Fluidization Systems  
1.0 INTRODUCTION; Part I: Smelting Reduction, Paper Processing, and Chemical Processing; 2.0 SMELTING REDUCTION; 3.0 PAPER PROCESSING; 4.0 CHEMICAL PROCESSING; Part II: Three-Phase Biofluidization; 5.0 BIOLOGICAL APPLICATIONS OF THREE-PHASE FLUIDIZATION; ACKNOWLEDGMENT; NOTATIONS; REFERENCES; Chapter 10. Dense Phase Conveying; 1.0 INTRODUCTION; 2.0 ADVANTAGES OF DENSE PHASE CONVEYING; 3.0 BASIC PHYSICS; 4.0 PULSED PISTON FLOWS; 5.0 VERTICAL FLOW SYSTEMS; 6.0 BOOSTERS; NOTATIONS; REFERENCES  
Chapter 11. Design Considerations of Long-Distance Pneumatic Transport and Pipe Branching

This volume, Fluidization, Solids Handling, and Processing, is the first of a series of volumes on "Particle Technology". Particles are important products of chemical process industries spanning the basic and specialty chemicals, agricultural products, pharmaceuticals, paints, dyestuffs and pigments, cement, ceramics, and electronic materials. Solids handling and processing technologies are thus essential to the operation and competitiveness of these industries. Fluidization

technology is employed not only in chemical production, it also is applied in coal gasification and combustion for pow

---