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Autore	Gupta A (Ashok)
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DESIGN; CAPACITY; POWER CONSUMPTION; PROBLEMS; REFERENCES; Chapter 6. Roll Crushers; INTRODUCTION; DESIGN OF ROLL CRUSHERS OPERATION OF ROLL CRUSHERS CAPACITY OF ROLL CRUSHERS; POWER CONSUMPTION OF ROLL CRUSHERS; HIGH PRESSURE GRINDING ROLLS (HPGR); OPERATION OF HPGR; CAPACITY OF HPGR; POWER CONSUMPTION OF HPGR; PROBLEMS; REFERENCES; Chapter 7. Tubular Ball Mills; INTRODUCTION; DESIGN OF TUBULAR MILLS; OPERATION OF TUBULAR BALL MILLS; ESTIMATION OF MILL CAPACITY; MILL POWER DRAW-MECHANICAL METHODS; PROBLEMS; REFERENCES; Chapter 8. Tubular Rod Mills; INTRODUCTION; DESIGN OF ROD MILLS; OPERATION OF ROD MILLS; ROD MILL CAPACITY; ROD MILL POWER DRAFT; MILL DRIVE; PROBLEMS; REFERENCES Chapter 9. Autogenous and Semi-Autogenous Mills INTRODUCTION; DESIGN OF AG/SAG MILLS; OPERATION OF AG/SAG MILLS; AG/SAG MILL POWER; CHOICE OF OPTIONS BETWEEN AG AND SAG MILLS; PROBLEMS; REFERENCES; Chapter 10. Mathematical Modelling in Comminution; INTRODUCTION; BASIS FOR MODELLING COMMINUTION SYSTEMS; MATHEMATICAL MODELS OF COMMINUTION PROCESSES; MODELLING CRUSHING AND GRINDING SYSTEMS; PROBLEMS; REFERENCES; Chapter 11. Screening; INTRODUCTION; BASIC DESIGN FEATURES IN SCREENS; OPERATION OF STRAIGHT SCREENS; CAPACITY AND SCREEN SELECTION OF STRAIGHT SCREENS; OPERATION OF CURVED SCREENS MODELLING OF THE SCREENING PROCESS SCREENING AND CRUSHING CIRCUITS; PROBLEMS; REFERENCES; Chapter 12. Classification; INTRODUCTION; DESIGN FEATURES OF MECHANICAL CLASSIFIERS; DESIGNING THE POOL AREA OF MECHANICAL CLASSIFIERS; DESIGN FEATURES OF CENTRIFUGAL CLASSIFIERS; OPERATION OF MECHANICAL CLASSIFIERS; CAPACITY OF MECHANICAL CLASSIFIERS; OPERATION OF CENTRIFUGAL CLASSIFIERS; HYDROCYCLONE MODELS; HYDROCYCLONE CAPACITY; HYDROCYCLONE CIRCUITS; PROBLEMS; REFERENCES; Chapter 13. Solid - Liquid Separation; INTRODUCTION; DESIGN FEATURES OF THICKENERS; THICKENER DESIGN-BATCH PROCESS THICKENER DESIGN-CONTINUOUS THICKENERS

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Sommario/riassunto

Mineral Processing Design and Operations is expected to be of use to the design engineers engaged in the design and operation of mineral processing plants and including those process engineers who are engaged in flow-sheets development. Provides an orthodox statistical approach that helps in the understanding of the designing of unit processes. The subject of mineral processing has been treated on the basis of unit processes that are subsequently developed and integrated to form a complete strategy for mineral beneficiation. Unit processes of crushing, grinding, solid-liquid separati

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