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Sommario/riassuntoAdvances in Cement Technology: Critical Reviews and Case Studies on Manufacturing, Quality Control, Optimization and Use is a collection of articles that reviews the important aspects of the science and technology of cement. The book presents 20 papers that cover areas such as geology, raw materials, manufacture, chemistry, additions, admixtures, and industrial wastes.		Cement Burning Technologies; ABSTRACT; 1 INTRODUCTION; 2 KILNS WITH EXTERNAL PREHEATERS; 3 TYPES OF PRECALCINERS; 4 PRECALCINING SYSTEMS; 5 REDUCING HEAT CONSUMPTION; 6 UTILIZATION OF WASTE FUELS AND COMBUSTIBLE WASTES; 7 PERFORMANCE OF VOLATILE SUBSTANCES IN THE KILN; 8 CLINKER COOLERS; 9 COMBINED METHODS OF CLINKER BURNING; 10 REFRACTORY MATERIALS IN THE KILNS; 11 DEDUSTING OF KILN GASES; 12 NEW TRENDS IN ELECTROSTATIC PRECIPITATION; REFERENCES; Chapter 5. Mineralizers and Fluxes in Clinkerization; 1 INTRODUCTION 2 FUNDAMENTAL STUDIES ON FLUXES AND MINERALIZERS 3 GENERAL STUDIES ON APPLICATIONS OF MINERALIZERS; 4 CONCLUSIONS; ACKNOWLEDGEMENT; REFERENCES; Chapter 6. Role of Volatiles in Cement Manufacture and in the Use of Cement; 1 INTRODUCTION; 2 SOURCES OF VOLATILE CONSTITUENTS AND THEIR INDIVIDUAL VOLATILITY CHARACTERISTICS; 3 REACTION PHENOMENOLOGY INVOLVING VOLATILE CONSTITUENTS; 4 CONDENSATION- VOLATILIZATION CYCLES; 5 BYPASS IN PREHEATER KILNS; 6 LIQUID PHASE AND VOLATILE CONSTITUENTS; AND PREHEATER CLOGGING 8 CLINKER PHASES WITH VOLATILE CONSTITUENTS AND PREHEATER CLOGGING 8 CLINKER PHASES WITH VOLATILE CONSTITUENTS ON APREHEATER CLOGGING 8 CLINKER PHASES WITH VOLATILE CONSTITUENTS ON CATALIES PENETRATION IN REFRACTORY LINING; 10 EFFECT OF ALKALIES ON CEMENT STORAGE; 11 VOLATILES AND CEMENT HYDRATION; 12 SUMMARY AND CONCLUSIONS; REFERENCES; Chapter 7. Refractories in Cement-making; 1 INTRODUCTION; 2 REFRACTORIES AND THEIR RANGE FOR CEMENT INDUSTRY; 3 THE ATTACK ON REFRACTORIES IN CEMENT ROTARY KILN; 4 FORMATION OF CLINKER COATING; 5 DIVISION OF A ROTARY KILN INTO ZONES AND CHOICE OF REFRACTORIES; ACKNOWLEDGEMENT; REFERENCES; Chapter 8. Portland Cement Phases: Polymorphism, Solid Solution, Defect Structure and Hydravieity.
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