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3.3.3 Defects/acceptance 3.3.4 Prices/terms of payment/bonds; 3.3.5 Alterations/claims; 3.3.6 Termination/suspension; 3.3.7 Insurance; 3.3.8 Secrecy; 3.3.9 Severability clause; 3.3.10 Coming into effect; 3.3.11 Signature policy; 4 Project execution; 4.1 Project organization; 4.1.1 Project structures; 4.1.2 Systematics; 4.1.2.1 Project manual; 4.1.2.2 Correspondence system; 4.1.2.3 Revision service; 4.1.3 Cost monitoring; 4.1.4 Time scheduling/monitoring of dates; 4.1.5 Computers in plant manufacturing; 4.2 Approval planning; 4.3 Component procurement; 4.3.1 Vessels; 4.3.2 Pumps 4.4 Piping and instrumentation diagrams 4.5 E/MC-technology; 4.5.1 Electrical engineering; 4.5.2 Measurement engineering; 4.5.3 Control engineering; 4.6 Layout and building design; 4.6.1 Layout design; 4.6.2 Building design; 4.7 Piping planning; 4.8 Documentation; 4.9 Erection; 4.9.1 Excavation and civil works; 4.9.2 Component assembly; 4.9.3 Pipe assembly; 4.9.4 Assembly E/MC technology; 4.9.5 Insulations; 4.9.6 Plant marking; 4.10 Commissioning; 4.10.1 Training; 4.10.2 Cleaning; 4.10.3 Pressure tests; 4.10.4 Functional tests; 4.10.5 System tests; 4.10.6 Cold commissioning 4.10.7 Warm commissioning 4.11 Warranty run/acceptance; Index

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Sommario/riassunto

This book describes the fascinating wealth of activities as they occur in the design, construction and commissioning of a chemical plant - a jigsaw puzzle of the work of chemical engineers, chemists, constructors, architects, electrical engineers, process automation engineers, economists and legal staff. The author first takes the reader through the conceptual phase, in which the economic relevance and environmental impact need to be considered and supplemented by accurate estimates of capital requirements and profitability. This phase ends with the choice of an appropriate engineering firm

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