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Descrizione fisica	1 online resource (256 pages) : illustrations
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Control Engineering in Development Projects; Preface; 1 Introduction; 1.1 Scope of This Book ; 1.1.1 Extent of Scope; 1.1.2 Limitations on Scope; 1.2 Control Engineering in an Engineering Enterprise ; 1.3 Control Engineering Within a Development Project ; 1.3.1 Technology Programs; 1.3.2 Concept Studies ; 1.3.3 Project Definition Phase; 1.3.4 Design Phase; 1.3.5 Implementation Phase; 1.4 Other Applications-- With Other Challenges ; 1.4.1 A Flight Control System ; 1.4.2 A Nuclear Power Plant ; 1.5 Modeling and Simulation ; 1.6 Discussion ; 1.7 Some Questions; Bibliography; 2 Technology Programs. 2.1 Introduction 2.2 Sensor Technology; 2.3 Electric Motor Technology ; 2.4 Manufacturing Tolerances and Other Effects; 2.5 Test Facilities; 2.6 Controller Hardware and Software ; 2.7 Discussion; 2.8 Some Questions; Bibliography; 3 Concept Studies; 3.1 Introduction; 3.2 Definition of the Plant; 3.2.1 Setting Up the Differential Equa.
Sommario/riassunto	This practical new guide to designing control systems gives readers a "virtual experience" into the complex engineering problems that may occur during the design and development process. This book gives engineers guidance in their journey to obtain a greater understanding of the thought processes involved in designing and developing successful control systems for radar, flight control, and several other applications. This constructive new resource takes engineers through various phases of project development. Clear examples and case studies are presented throughout demonstrating various management

styles. Readers discover a variety of challenges that could occur during actual projects. This book represents a unique contribution to the technical literature on control system design by illustrating principles in the language of control engineering with copious figures. It presents methodical procedures for setting up simulation models used for integrating controls systems with hardware in order to reduce errors.
