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Nota di contenuto	PRACTICAL PROCESS CONTROL; CONTENTS; Preface; 1. Introduction; 1.1 The Process Industries and Regulatory Control; 1.2 P&I Diagrams; 1.3 Regulatory Control Example; 1.4 Control Loop; 1.5 Example Process; 1.6 Cascade Control; 1.7 Summary; Literature Cited; 2. Gain or Sensitivity; 2.1 Process Design Versus Process Control; 2.2 What Do We Mean by "Process Gain"; 2.3 Linear Versus Nonlinear Processes; 2.4 Operating Lines and Gains from Process Tests; 2.5 Action; 2.6 Impact of Process Nonlinearities on Tuning; 2.7 Scheduled Tuning; 2.8 Heat Transfer Processes; 2.9 Vacuum Processes; 2.10 Summary Literature Cited3. Process Dynamics; 3.1 First-Order Lag and Time Constant; 3.2 Integrating Process; 3.3 Self-Regulated Versus Non-Self-Regulated Processes; 3.4 Dead Time; 3.5 Measurement Issues; 3.6 Effect of Dead Time on Loop Performance; 3.7 Mixing; 3.8 Process Models; 3.9 Approximating Time Constants; 3.10 Ultimate Gain and Ultimate Period; 3.11 Damping; 3.12 Simple Performance Measures; 3.13 The Integral Criteria; 3.14 Summary; 4. Controller Modes and Mode Selection; 4.1 Mode Characteristics; 4.2 Options for Tuning Coefficients; 4.3 Computing the PID Control Equation

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Sommario/riassunto

Practical Process Control (loop tuning and troubleshooting). This book differs from others on the market in several respects. First, the presentation is totally in the time domain (the word ""LaPlace"" is nowhere to be found). The focus of the book is actually troubleshooting, not tuning. If a controller is ""tunable"", the tuning procedure will be straightforward and uneventful. But if a loop is ""untunable""", difficulties will be experienced, usually early in the tuning effort. The nature of any difficulty provides valuable clues to what is rendering the loop ""untunable"". For example, if r
