

1. Record Nr.	UNINA9910792465203321
Autore	Norton M. P (Michael Peter), <1951->
Titolo	Fundamentals of noise and vibration analysis for engineers / / M.P. Norton and D.G. Karczub [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2003
ISBN	1-107-12670-3 1-282-48674-8 9786612486746 1-139-16392-2 0-511-67379-5 0-511-67498-8 0-511-67173-3 0-511-67045-1 0-511-67300-0
Edizione	[Second edition.]
Descrizione fisica	1 online resource (xx, 631 pages) : digital, PDF file(s)
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Soggetti	Acoustical engineering Noise Vibration
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
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Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover; Half-title; Title; Copyright; Dedication; Contents; Preface; Acknowledgements; Introductory comments; 1 Mechanical vibrations: a review of some fundamentals; 2 Sound waves: a review of some fundamentals; 3 Interactions between sound waves and solid structures; 4 Noise and vibration measurement and control procedures; 5 The analysis of noise and vibration signals; 6 Statistical energy analysis of noise and vibration; 7 Pipe flow noise and vibration: a case study; 8 Noise and vibration as a diagnostic tool; Problems; Appendix 1 Relevant engineering noise and vibration control journals Appendix 2 Typical sound transmission loss values and sound absorption coefficients for some common building materials Appendix 3 Units and conversion factors; Appendix 4 Physical properties of some

common substances; Answers to problems; Index

Sommario/riassunto

Noise and Vibration affects all kinds of engineering structures, and is fast becoming an integral part of engineering courses at universities and colleges around the world. In this second edition, Michael Norton's classic text has been extensively updated to take into account recent developments in the field. Much of the new material has been provided by Denis Karczub, who joins Michael as second author for this edition. This book treats both noise and vibration in a single volume, with particular emphasis on wave-mode duality and interactions between sound waves and solid structures. There are numerous case studies, test cases, and examples for students to work through. The book is primarily intended as a textbook for senior level undergraduate and graduate courses, but is also a valuable reference for researchers and professionals looking to gain an overview of the field.

2. **Record Nr.**

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Autore

Smith Cecil L

Titolo

Advanced process control [[electronic resource]] : beyond single loop control / / Cecil L. Smith

Pubbl/distr/stampa

Hoboken, N.J., : Wiley, c2010

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Descrizione fisica

1 online resource (464 p.)

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Soggetti

Chemical process control
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Nota di contenuto

ADVANCED PROCESS CONTROL; CONTENTS; Preface; 1 Introduction; 2

Cascade Control; 3 Split-Range Control; 4 Override Control; 5 Valve Position Control; 6 Ratio and Feedforward Control; 7 Loop Interaction; 8 Multivariable Control; Index

Sommario/riassunto

This book fills the gap between basic control configurations (Practical Process Control) and model predictive control (MPC). For those loops whose performance has a direct impact on plant economics or product quality, going beyond simple feedback or cascade can improve control performance, or specifically, reduce the variance about the target. However, the effort required to implement such control technology must be offset by increased economic returns from production operations. The economic aspects of the application of the various advanced control technologies are stressed throughout the book.
