NOISE AND VIBRATION CONTROL ENGINEERING

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PRINCIPLES AND APPLICATIONS

SECOND EDITION

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PREFACE

The aim of this edition continues to be the presentation of the latest information on the most frequently encountered noise and vibration problems. We have endeavored to introduce new chapters and to update those chapters where the field has advanced. New or fully rewritten chapters are Sound Generation, Noise Control in Heating, Ventilating, and Air Conditioning Systems, Active Control of Noise and Vibration, Sound-Absorbing Materials and Sound Absorbers, Outdoor Sound Propagation, Criteria for Noise in Buildings and Communities, and Acoustical Standards for Noise and Vibration Control. Substantial new information has been added to Passive Silencers. All other chapters have been reviewed for timeliness.

Worldwide, there has been increased interest in noise and vibration control. Much of this interest has been generated by the expanding activities in the countries of the European Union and the Far East. Workshops on the latest developments in global noise policy are being held annually—the latest in Prague (Czech Republic) in 2004 and in Rio de Janeiro (Brazil) in 2005. There are signs of expanded interest in noise policy in the United States. Consumers are demanding quiet to a greater degree, the best example being the improved quiet interiors of automobiles. Other consumer products with greater noise control are already following or are likely to follow. Manufacturers must be alert to the increased competitiveness of imported products.

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