

## **Acoustical Materials: Solving the Challenge of Vehicle Noise**

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First, I will report on the contents then provide my opinion of this brand-new book.

The eight-page table of contents lists the ten chapters:

1. Vehicle acoustics and understanding of noise, 30 pp.
2. Instrumentation and test facilities, 28 pp.
3. Hearing parameters, 14 pp.
4. Vehicle noise sources and solutions, 27 pp.
5. Sound absorber, 30 pp.
6. Sound barrier, 30 pp.
7. Vibration damper, 26 pp.
8. Case studies, 44 pp.
9. Test methods, 42 pp.
10. Closing the loop, 17 pp.

Each chapter, with about ten sections in each, is followed by a listing of numerous references and a section containing additional reading.

Following this is a forward by Jack Mowry, the famous Editor and Publisher of Sound and Vibration magazine, a two-page preface by the author, acknowledgements, "About the Author," and a listing of acronyms. After the chapters, there is a comprehensive index.

If you have no time to read this, my review in brief is this: an incredibly good book that needs to be on every acoustician's bookshelf.

Each chapter is fully detailed and informative. The chapters on sound barriers and absorbers are comprehensive and sufficient to provide more than just a basic understanding of the subjects. Also, the chapters on test methods are perfect for an introduction or even a review of the latest acoustical and vibration testing. The last chapter, "Closing the loop," tops off this excellent work while it discusses some of the fundamental concepts of acoustics, how to pick a test facility, and, of all things, how to design a reverb room.

That is enough of technical review. As a certified geezer, I have been reviewing books for years and this book is exceptionally excellent. The book is beautiful. Detailed, clear figures in color that are described fully in the text, wide margins (for note taking), and well-explained equations are just some characteristics that make this book the very best textbook I ever read or reviewed. This book is applicable not only for those in the transportation industry but also for anyone doing noise control. This book is highly recommended.

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