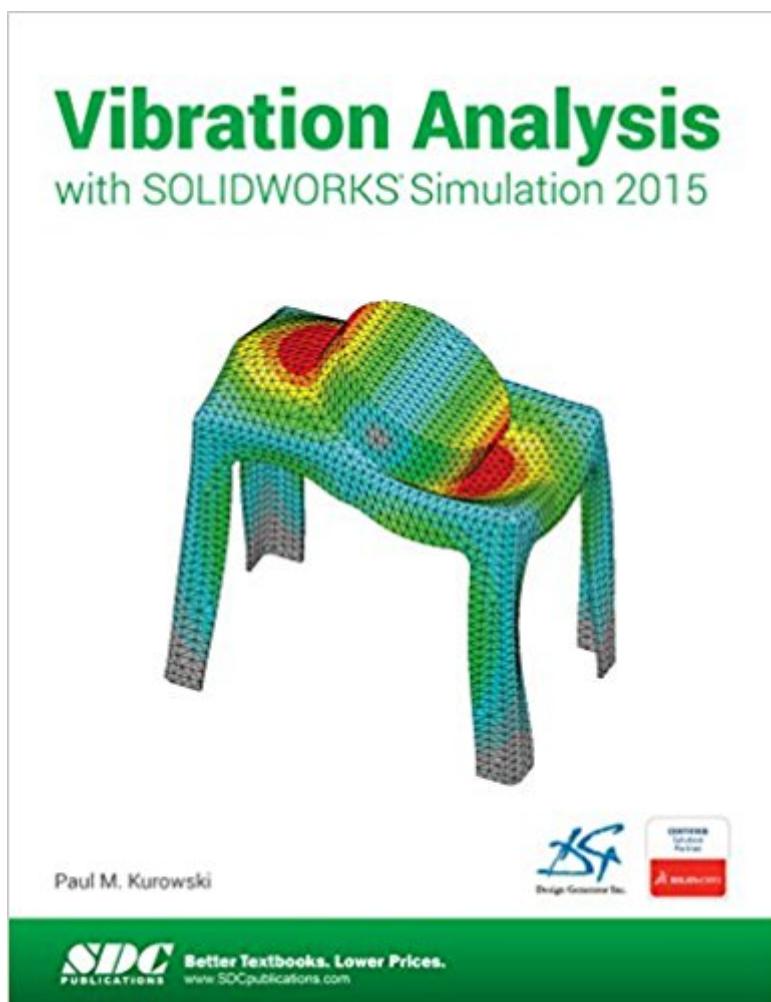


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# Vibration Analysis With SOLIDWORKS Simulation 2015



## Synopsis

Vibration Analysis with SOLIDWORKS Simulation 2015 goes beyond the standard software manual. It concurrently introduces the reader to vibration analysis and its implementation in SOLIDWORKS Simulation using hands-on exercises. A number of projects are presented to illustrate vibration analysis and related topics. Each chapter is designed to build on the skills and understanding gained from previous exercises. Vibration Analysis with SOLIDWORKS Simulation 2015 is designed for users who are already familiar with the basics of Finite Element Analysis (FEA) using SOLIDWORKS Simulation or who have completed the book *Engineering Analysis with SOLIDWORKS Simulation 2015*. Vibration Analysis with SOLIDWORKS Simulation 2015 builds on these topics in the area of vibration analysis. Some understanding of structural analysis and solid mechanics is recommended.

**Topics Covered**

- Differences between rigid and elastic bodies
- Discrete and distributed vibration systems
- Modal analysis and its applications
- Modal Superposition Method
- Modal Time History (Time Response) analysis
- Harmonic (Frequency Response) analysis
- Random Vibration analysis
- Response Spectrum analysis
- Nonlinear Vibration analysis
- Modeling techniques in vibration analysis

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Clear explanations. examples work and illustrate a point. This is how I wish all self-teaching manuals were!

Does not show any good case study & real life application.

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