

Chapter 17

Vibration Analysis

Chapter Objectives

When you have finished Chapter 17, “Vibration Analysis,” you should be able to do the following:

1. Understand the difference between acceleration, velocity, and displacement in relation to vibration analysis.
2. List the four key steps in a vibration analysis process.
3. Describe the relationship between time waveform and frequency spectrum.
4. List the three components used to measure vibration.
5. Identify five common faults and know their characteristics.
6. Understand the frequency spectrum analysis.
7. Comprehend the applications of vibration analysis.