



## VIBRATION ANALYSIS

ONE DAY TRAINING COURSE

### COURSE OVERVIEW

This fundamental course is designed and developed for professionals who are new to vibration monitoring and analysis. This course will provide in depth knowledge of why it is important to know the condition of the machine and a quick demonstration of vibration measurements and samples of data that indicate machine faults making it easy to learn about the faults and their remedies. Case studies will be presented using historical graphs to understand the process easily.

### COURSE OVERVIEW

Are you ready to get started in vibration analysis and condition monitoring? Then you will enjoy this course. The course focuses on periodic, single channel data collection and analysis for condition based maintenance programs. A foundation is established for in-depth understanding of spectrum and waveform relationships. Learn the vibration fundamentals which will demystify the terms and concepts, and you will see how spectrum analysis can be used to diagnose faults.

ONE DAY | 0900 - 1700 HRS

USD 1,200.0 / SESSION

15 PARTICIPANTS

### COURSE CONTENT

Principles of vibration | Motion, r.m.s./peak/peak-peak, frequency/period | Displacement, velocity & acceleration | Units and unit conversion | Waveform and spectrum (FFT) | Natural frequencies | Basic forcing frequency | Data acquisition | Transducers & mounting | Fault diagnosis | Imbalance, misalignment, looseness, eccentricity, resonance Defects associated with bearings, gears, belts, electric motors.

### WHO SHOULD ATTEND

If you have been performing vibration analysis for less than one year, or if you have been collecting vibration readings and leaving the analysis to another person, then this course is for you. This course is also designed for reliability engineers, PdM program managers, and other maintenance staff who would like to understand condition monitoring with a focus on vibration analysis, and take the ISO or ASNT exam.