

Category III: Vibration Analysis

NorthPoint's Vibration Analysis Training Program is generally compliant with the ISO 18436-2 standard for personnel involved in non-destructive testing, condition monitoring and machinery diagnostics, offering the appropriate theoretical and practical hands-on knowledge of vibration measurement and analysis. The ISO 18436-2 standard stipulates theory covered is non-product specific to ensure that concepts are grasped prior to introducing instrumentation technology. The courses are recognized by the Engineering Institute of Canada for Continuing Education Units (CEU's).

NorthPoint's Vibration Analysis training courses (Category I – III) track directly to optional certification examinations. Certification provides a means for evaluating and documenting the competence of individuals and provides companies with the confidence of identifying individuals who are best suited and qualified to perform work.

Attendees should have completed or have the knowledge and skills taught in Category II Vibration Analysis and have a minimum of 36 months of relevant experience. The ISO 18436-2 standard also recommends that students should have successfully completed 2 or more years of mechanical technology or mechanical engineering at an accredited college, university or technical school. Students must be able to manipulate simple algebraic equations, use a basic scientific calculator and be familiar with the basic operation of computers.

The objective of this course is to qualify individuals to perform and/or direct vibration measurements and analysis in according to established and recognized procedures.

Category III Vibration Analysis trained individuals will be qualified to:

- Perform and / or direct vibration measurements and analysis
- Select the appropriate vibration analysis technique
- Specify vibration hardware and software: portable and permanently installed systems
- Diagnose single channel spectra, waveforms and orbits; steady state and transient; with and without phase trigger
- Establish vibration monitoring programs including determining machines for periodic and continuous monitoring, frequency of testing; and development of route plans
- Establish a program for the specification of vibration levels and acceptance criteria for new machinery
- Measure and analyze basic operating deflection shapes
- Understand in the sense of being able to direct the use of alternative technologies (for example: ultrasonics, thermography, motor current signature analysis, oil analysis)
- Recommend field corrective actions including balancing, alignment and component replacement
- Able to use advanced technologies including demodulation and PeakVue (tm CSI)
- Be able to do basic single plane balancing
- Report to management on program objectives, budgets, cost justification, personnel development
- Prepare reports on machine condition; recommend corrective action; report on effectiveness of repairs
- Provide instructions and technical direction to vibration trainees

For more information or to register email adoyle@northpointts.com