



VA CAT III

ISO 18436 Category III

Level 3 Vibration Analyst Training & Certification

Distance Learning (Online) Training

Learn from the world's leading provider of vibration analysis training & certification. The Reliability Institute of Australia provides Mobius Institute on-line courses - the most understandable and interesting training available.

The Mobius Crystal Clear™ training methodology is unique, using hundreds of 3D animations and software simulations that make complex concepts easier to understand.

Mobius Institute is ISO/IEC 17024 and ISO 18436-1 accredited, meaning that you are assured that your certification meets the highest global standards, and our training teaches you everything you need to know according to the ISO 18436 standard for vibration analyst training.

There is no more highly regarded training & certification available.



VA CAT-III Course Overview

The Category-III course is intended for people who are confident with spectrum analysis but who wish to push on and learn more about signal processing, time waveform and phase analysis, cross-channel testing, machine dynamics, and fault correction.

You will learn to diagnose all of the common fault conditions with rolling element and sleeve bearing machines, by utilizing time waveforms, phase readings and other techniques to diagnose faults. You will also learn machine dynamics (natural frequencies, resonance, etc.) and how to perform resonance testing and correct resonance problems.

The course also covers single and cross-channel measurement capabilities of your analyzer.

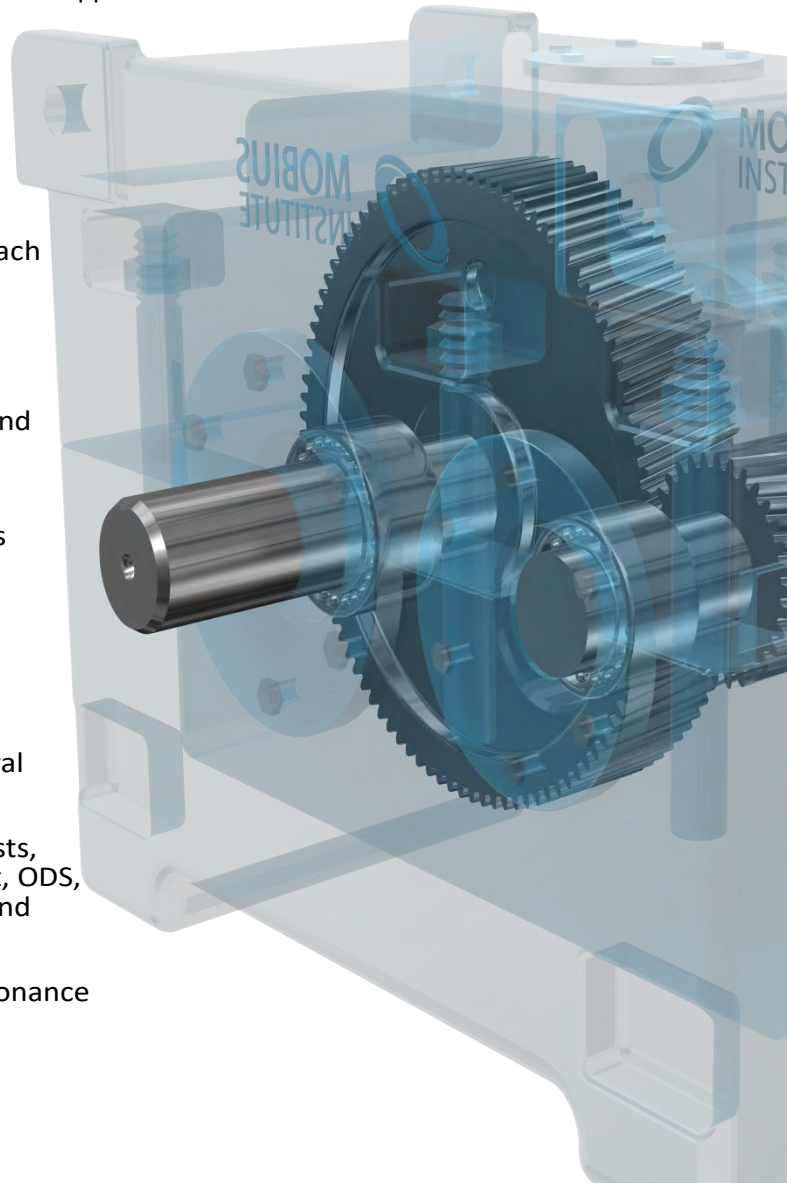
After completing the CAT-III course, you will be able to set and run a successful vibration program and mentor the junior analysts.



Mobius vibration analysis training is unique - using 3D animations and numerous software simulators that completely demystify vibration analysis. While vibration training courses have traditionally been very theoretical and difficult to understand, you will be captivated by the Mobius training methods, and you will enjoy the practical approach.

You will leave the course with a solid understanding of:

- How a well-designed program and the RCM approach will reduce costs and improve business outcomes.
- The various other main condition monitoring technologies.
- How to select the correct measurement location and axis, and collect good, repeatable measurements.
- What the Fmax, resolution, averaging and other single- channel and cross-channel analyzer settings mean and how to select the optimum settings.
- How to analyze vibration spectra, time waveform, envelope, and phase measurements.
- How to diagnose a wide range of fault conditions.
- How mass, stiffness and damping affects the natural frequency of a structure.
- How to use phase readings, bump tests, impact tests, negative averaging, peak-hold averaging, transient, ODS, modal analysis to determine natural frequencies and visualize machine movement.
- How to balance and align a machine, correct a resonance conditions, and employ isolation.



VA CAT-III Course Description

Format:

On-Line training is within an LMS (Learning Management System).

The course is made up of videos of short studio recordings, presented by Jason Tranter, the renowned Mobius CEO and founder.

It is very comprehensive and informative, with audio commentary and animated visual slides. A colour bound printed course manual is provided to follow the course and study offline. Students can choose either 4 months study access or Life-Time access (with no expiry date). For both options, students can watch the videos more than once.

Duration:

Minimum of 43 hours of training

Exam:

- On-line Exam by Invigilation (authorised supervision)
- 4 hours duration
- 70% passing grade.
- Certification is valid for 5 Years.

Certification Prerequisite:

36-months of vibration analysis experience, verified by an independent person and have previously been certified to VCAT-II by a MIBoC approved certification body

Topics covered:

- Review of condition monitoring technologies and the ISO standards
- Signal processing and data acquisition
- Time waveform analysis
- Phase analysis
- Dynamics (natural frequencies and resonance)
- Testing for natural frequencies
- Operating Deflection Shape (ODS) analysis
- Modal analysis and intro to FEA
- Correcting resonances
- Rolling element bearing fault detection
- Journal bearing fault detection
- Electric motor testing
- Pumps, fans and compressors
- Gearbox fault detection
- Corrective action
- Running a successful condition monitoring program
- Acceptance testing
- Review of ISO standards

VA CAT-III Course Outcomes

Outcome:

The key outcome with the VA CAT-III course is you will transition from being a vibration analyst who should be supervised to a person who is capable of running a CM program, being a senior consultant, solving more difficult problems, and taking a leadership role.

VA CAT-III Certification

All Mobius certified analysts receive personalized logos with their certification number and name for their own professional use. Mobius Institute also maintains a listing of all certified analysts on our website and provides each analyst with a certification confirmation webpage.

For more information about Mobius Institute's accreditation, and the recognition of your certification by the ISO 18436 standard, please visit www.mobiusinstitute.com/certification.



To learn more about other Classroom or On-Line training options or to enquire, contact RELIABILITY INSTITUTE OF AUSTRALIA



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Authorized Mobius Training Partner

