



CAT-II

ISO 18436 Category II Intermediate Vibration Analyst Training & Certification

Classroom Training hosted by MLT Machine & Laser technology

Learn vibration analysis from the world's leading provider of training & certification. At Mobius Institute, we offer the most understandable and interesting training available. Our Crystal Clear™ training methodology is unique, using hundreds of 3D animations and software simulations that make complex concepts easier to understand. We offer ISO 18436 Category I to IV training via public venue courses as well as online through the Mobius Institute website.

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.



CAT-II Course Overview



The Category-II course spans four days with an additional half day for review and the exam. It is intended for people who have mastered the basics but who need to be able to take good data (and decide how the data collector should be set up), analyze a range of fault conditions, and understand balancing and alignment.

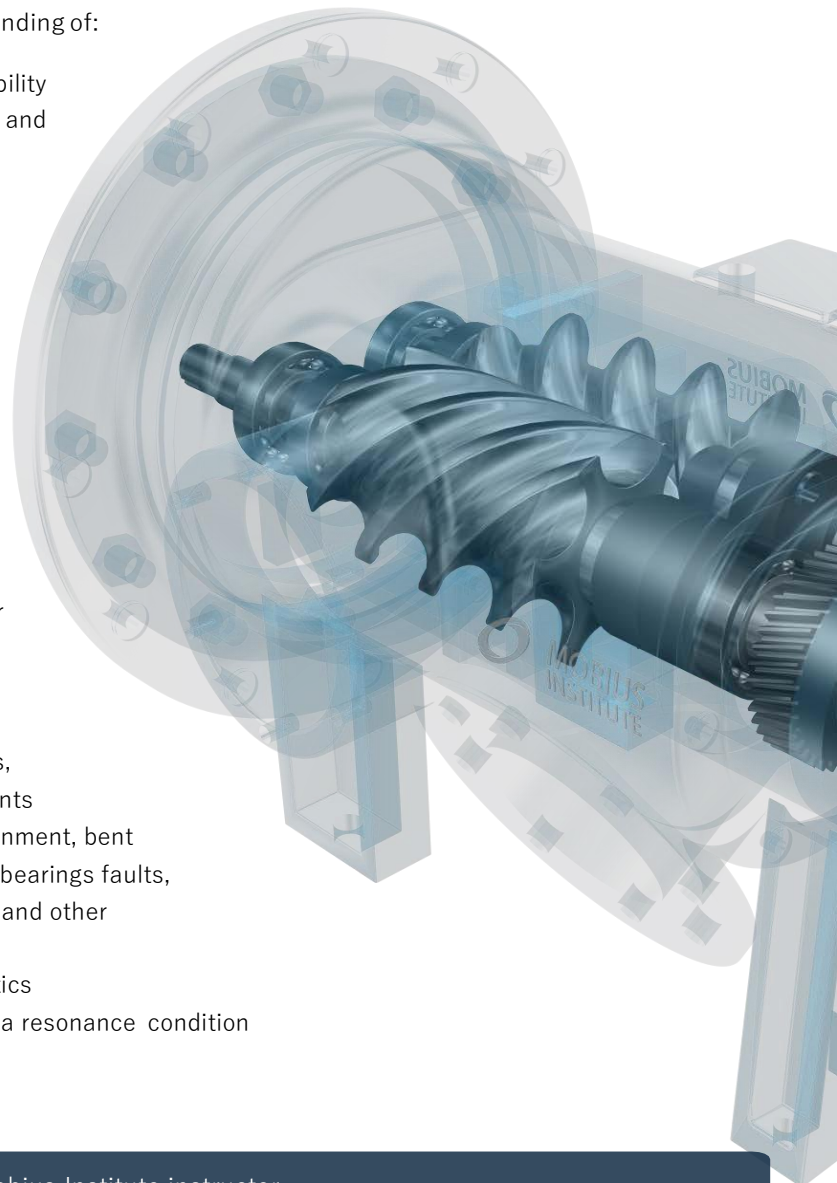
We teach you to test machines correctly, how to diagnose faults accurately, perform additional diagnostic tests for verification, how to set vibration alarm limits, and how to correct certain types of faults. You will learn what your analyzer

settings mean so that you can take the best measurements. And you will learn why the vibration signatures change the way they do and how to use time waveform analysis and phase analysis to verify the fault condition.

Mobius makes learning about vibration analysis unique. We use 3D animations, Flash simulations, and numerous software simulators that completely demystify vibration analysis. While vibration training courses have traditionally been very theoretical, difficult to understand, (and boring), you will be captivated by the Mobius training methods, and you will enjoy our practical approach. You will take away skills that you can immediately apply to your job, and you will truly understand what you are doing.

You will come away from the course with a solid understanding of:

- How a well-designed program and a reliability centered maintenance approach improve the OEE and therefore the bottom line
- The condition monitoring technologies: acoustic emission, infrared analysis (thermography), oil analysis, wear particle analysis, & motor testing via supplementary training
- How machines work; via supplementary self-study using the “Equipment Knowledge” section
- How to select the correct measurement location and axis, and collect good, repeatable measurements
- What the Fmax, resolution, averaging and other analyzer settings mean, and how to select the optimum settings for a wide variety of machine types
- How to analyze vibration spectra, time waveforms, envelope (demodulation), and phase measurements
- How to diagnose: unbalance, eccentricity, misalignment, bent shaft, cocked bearing, looseness, rolling element bearings faults, journal bearing faults, gearbox faults, resonance, and other conditions
- How to set alarm limits manually and with statistics
- How to balance and align a machine, and correct a resonance condition



CAT-II Course **Week 43 - 2022 Gothenburg**

Duration: 4 days Cat II / Level II + ½ day Review & certification examination, 70% passing grade

Date: Week 42 24-28 oktober 2022

Price: 22.900 SEK + Hotel and full board: 2.500 SEK/day (includes, Breakfast, Lunch and Dinner all days)

Location: Hisingen, Göteborg

Format: Classroom

Compliance: ISO 18436 Category II – Vibration Analyst, ASNT SNT- TC-1A Recommended Practice

Course Pre-Study: Registered students are given access to the online version of the course via the Mobius Institute Learning Zone before the class and for six months after course completion to assist them with converting the course information into practice

Certification Prerequisite: Prior experience is not required for attending the training course, but 18 months of experience is required for certification.

Outcome: You will come away from this course with a very good understanding of vibration analysis fundamentals, and you will be competent in quality data acquisition and diagnosing common machine faults.

Category II - Candidate Profile:

- You have a good understanding of the vibration fundamentals
- You want to be capable of confidently diagnosing a wide range of fault conditions, correcting certain conditions, and taking accurate measurements
- You look forward to the opportunity to develop your skills in the field of machine condition & vibration analysis
- You are seeking to become certified to international standards (ISO-18436) by an accredited certification body
- You want to become a key member of your condition monitoring team

Topics

- Review of maintenance practices
- Review of condition monitoring technologies
- Principles of vibration; Review of basics, waveform, spectrum (FFT), phase and orbits
- Understanding signals: modulation, beating, sum/difference
- Data acquisition Signal processing
- Vibration spectrum analysis
- An introduction to time waveform analysis
- An introduction to orbit analysis
- Phase analysis: bubble diagrams and ODS
- Enveloping (demodulation), shock pulse, spike energy, PeakVue™
- Fault analysis
- Equipment testing and diagnostics including impact testing (bump tests) and phase analysis
- Corrective action
- Running a successful condition monitoring program
- Acceptance testing
- Review of ISO standards

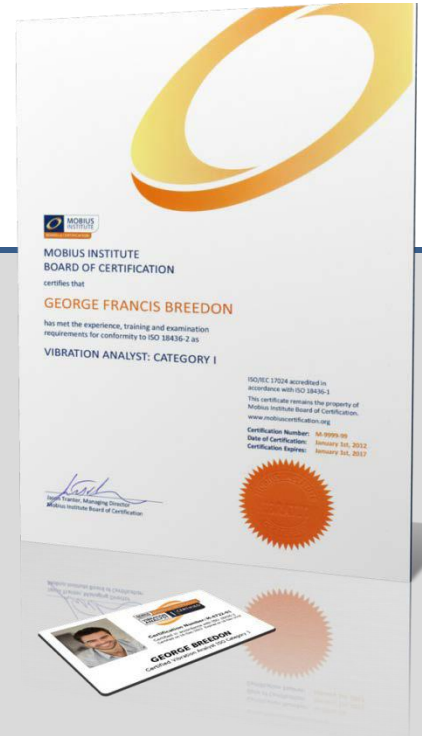
The BEST Analysts are MOBIUS Trained™

The purchase of the public course includes six months of access to the Mobius Learning Zone (an excellent web resource, to prepare for the course, and to follow up after the course), a course manual, quick-reference guide, Mobius mouse pad with fault diagnostic reminders and pen. Examinations for certification are offered as an option at the end of the course.

CAT-II 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.



Get started today

Contact MLT to reserve your seat for this or for coming trainings, Visit our website at www.mlt.se or send a an email to utbildning@mlt.se and we will get in contact with you.



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