





Register for ISO CAT Training

Become an ISO 18436-2 certified vibration expert too!


CERTIFICATION WITH WORLDWIDE RECOGNITION

 VIBRATION ANALYST
ISO-Cat. II M-1234-01

Seminar Overview
2023


 **Category IV – Vibration master**
Certified vibration seminar
(ISO 18436-2)

Target audience	This seminar is intended for engineers, technicians and diagnosis experts with a very good understanding of vibration diagnosis, vibration analysis and system analysis.
Certification prerequisite	Proof of 5 years' experience in the field of vibration analysis and an accredited Category 3 certification. The preparatory course (online learning) is to be completed (active participation) before the classroom seminar in order to comply with the minimum training time stipulated in the ISO.
Contents	In accordance with DIN ISO 18436-2 and special consideration given to vibrations in turbomachinery 42 hours of online learning, 4 days of face-to-face training and a final exam on day 5
Duration	4 days + 0.5 days final exam
Seminar hours	Mon: 9:00 AM - 5:00 PM Tue / Wed / Thu: 8:00 AM - 4:00 PM Final exam: Fri 8:00 AM - 01:00 PM
Price	Price: 3,647 € + VAT per participant Pre-course fee (online learning), 3,584 € + VAT per participant Seminar fee incl. training materials, plus examination fee 668 € + VAT
Award upon successful completion of exam	Certified vibration master Category 4 in accordance with ISO 18436- 2 (subject to successful completion of the exam). The training materials are in English. You can choose whether you write the exam in German or in English.
Note about the exam	The final exam consists of 100 questions (multiple choice) to be answered within 300 minutes.. The exam is deemed to have been passed, if at least 70% of the questions have been answered correctly.. A good knowledge of English is required.
Dates	Nov 27 – Dec 01, 2023
Location	Hotel am Schloßpark in München/Ismaning

 **Category III – Vibration specialist**
Certified vibration technician
(ISO 18436-2)


Target audience	The ISO CAT III seminar is intended for technicians, engineers and diagnosticians with a very good understanding of vibration diagnosis.
Certification prerequisite	At least 36 months' experience in vibration metrology and category II certification in accordance with ISO 18436-2 or 60 months' experience in the field of vibration metrology
Contents	According to ISO 18436-2
Duration	4 days + 0.5 days final exam
Seminar hours	Mon: 9:00 AM - 5:00 PM Tue / Wed / Thu: 8:00 AM - 4:00 PM Final exam: Fri 8:00 AM - 01:00 PM
Price	EUR 3,201 + VAT per participant including. training materials, lunch, plus exam fee EUR 532 + VAT
Award upon successful completion of exam	Certified vibration specialist Category III in accordance with ISO standard 18436-2
Note about the exam	The final exam consists of 100 questions (multiple choice) to be answered within 240 minutes. The exam is deemed to have been passed, if at least 70% of the questions have been answered correctly.
Dates	March 13 – 17, 2023 1. August 21 – 25, 2023* 2. November 13 – 17, .2023 1.
Location	Hotel am Schloßpark in München/Ismaning 1. Berlin InterCity Hotel BER Airport 2.

* Seminar in englischer Sprache mit englischen Unterlagen / in English with English course materials

 **Category II - Vibration analyst**
Certified vibration technician
(ISO 18436-2)

Target audience	The ISO CAT II seminar is intended for technicians, engineers and experts, whose responsibilities include measurement data evaluation and diagnosis.
Certification prerequisite	At least 18 months' experience in vibration metrology
Contents	According to ISO 18436-2. With many interactive animations for better understanding and conveyance of practical knowledge for your vibration condition and vibration evaluations.
Duration	4 days + 0.5 days final exam
Seminar hours	Mon: 9:00 AM - 5:00 PM Tue / Wed / Thu: 8:00 AM - 4:00 PM Final exam: Fri 8:00 AM - 12:00 PM
Price	EUR 2,830 + VAT per participant including. training materials, lunch, plus exam fee EUR 470 + VAT
Award upon successful completion of exam	Certified vibration analyst Category II in accordance with ISO standard 18436-2
Note about the exam	The final exam consists of 100 questions (multiple choice) to be answered within 180 minutes. The exam is deemed to have been passed, if at least 70% of the questions have been answered correctly.
Dates	May 22 – 26, 2023 1. July 10 – 14, 2023* 2. September 25 – 29, 2023 3. October 09 – 13, 2023 1. October 16 – 20, 2023 4. December 11 – 15, .2023 1.
Location	Hotel Am Schloßpark in München/Ismaning 1. Berlin InterCity Hotel BER Airport 2. Hamburg/Norderstedt PLAZA Premium Park Hotel 3. Düsseldorf/Ratingen Relaxa Hotel Airport 4.

* Seminar in englischer Sprache mit englischen Unterlagen / in English with English course materials

 **Category I - Vibration technician**
Certified vibration technician
(ISO 18436-2)

Target audience	The ISO CAT I seminar is intended for practitioners and technicians involved in measurement data acquisition for mobile measurements and/or for telemonitoring.
Certification prerequisite	At least 6 months' experience in vibration metrology
Contents	According to ISO 18436-2. With many interactive animations for better understanding and conveyance of practical knowledge for your condition and vibration measurements
Duration	3.5 days + 0.5 days final exam
Seminar hours	Mon: 9:00 AM - 5:00 PM Tue / Wed / Thu: 8:00 AM - 4:00 PM Final exam on Thursday afternoon
Price	EUR 2,460 + VAT per participant including. training materials, lunch, plus exam fee EUR 343 + VAT
Award upon successful completion of exam	Certified vibration technicians Category I in accordance with ISO standard 18436- 2
Note about the exam	The final exam consists of 60 questions (multiple choice) to be answered within 120 minutes.. The exam is deemed to have been passed, if at least 70% of the questions have been answered correctly.
Dates	March 06 – 09, 2023 1. July 03 – 06, 2023 1. September 18 – 21, 2023 2.
Location	Hotel Am Schloßpark in München/Ismaning 1. Berlin InterCity Hotel BER Airport 2.



The four successive and interrelated ISO CAT categories.

How is personnel classification carried out?

Facts and news on certification

ISO 18436-2 defines the requirements for this 3rd party certification on a global scale in terms of content, qualification, training and requirements for individuals that wish to perform condition monitoring and diagnostics for machines, by using vibration measurement and analysis.

The German translation of this internationally recognized ISO standard is available from Beuth-Verlag as DIN ISO 18436-2.

11/2015	DIN ISO 18436-2	DIN
Condition monitoring and diagnostics of machines – Requirements for the qualification and assessment of personnel – Part 2: Vibration condition monitoring and diagnostics (ISO 18436-2:2015)		
		
		
GERMAN STANDARD ICS 25.020; 03.100.30; 17.180 Standards Committee for Acoustics, Noise Reduction and Vibration Control (NALS) in DIN and VDI		

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✓ Vibration technician ISO CAT I M-1234-01

Vibration technician - ISO CAT I

Carry out predefined single-channel measurements for condition monitoring

Knowledge & skills:

- Know basic principles of vibrations and measurement units
- Record reliable and reproducible measurement data
- Detect errors in the acquired data
- Compare scalar vibration values with predefined alarm limits
- Recognize differences in scalar vibration values and trends
- Report on visual observations of equipment

ISO certifications of vibration personnel is the highest form of training and are the most widely recognized internationally following the revision of ISO 18436-2.

✓ Vibration analyst ISO CAT II M-2345-02

Vibration analyst - ISO CAT II

Perform and analyze most single-channel vibration measurements on industrial machinery, as well as master all skills and practical experience from Category I

Knowledge & skills:

- Define measurements and activities for routine data acquisition for Category I personnel
- Master basic principles of signal analysis and device parameterization
- Carry out single-channel measurements with shock excitation to determine natural frequencies
- Interpret routine measurement results and acceptance measurements in accordance with specifications and standards
- Recommend basic corrective measures according to experience in the field of industrial machinery, as well as single-plane-balancing of rotors with rigid behavior
- Brief and provide technical guidance to Category I personnel

✓ Vibration specialist ISO CAT III M-3456-03

Vibration specialist - ISO CAT III

Perform and analyze specific vibration measurements on rotating machinery and equipment, as well as all the skills and practical experience from Category I and II

Knowledge & skills:

- Launch, plan and conduct programs for routine condition monitoring
- Determine additional investigations for fault diagnosis, including alternative techniques for condition monitoring
- Specify the hardware and software suitable for offline and online vibration measurement and system protection
- In-depth knowledge of the principles of vibration analysis (spectral analysis, time waveform analysis, orbit analysis, transfer functions, fundamental operating deflection shapes and envelope analysis)
- Evaluate corrective measures for machinery including performance of two-plane field balancing of rotors with rigid behavior
- Brief and provide technical guidance to personnel from other categories

✓ Vibration master ISO CAT IV M-4567-04

Vibration master - ISO CAT IV

All knowledge and skills from Category I to III and ability to direct and verify condition monitoring strategies

Knowledge & skills:

- Measure and interpret multi-channel spectral analyses e.g. transfer function, phase and coherence
- Understand signal analysis in the frequency and time domain including orbits and mastering validity limits
- Determine natural frequencies, natural vibrations and damping of systems and deriving corrective Changes
- Evaluate operating deflection shapes with recommendations for corrective measures
- Apply basic concepts in rotor dynamics
- Interpret specifications, international standards and guidelines
- Measure and evaluate vibrations caused by gas pulsations, including remedial measures
- Recommend remedial measures for flexible bearings and other attachment variants and for foundation problems