



Machinery Diagnostics Institute

MDI – Machinery Diagnostics Institute are worldwide professionals providing class room and virtual online interactive technical trainings, based in Queensland – Australia.

Teaching staff are real practitioners specialized in delivering knowledge of Machinery Diagnostics techniques from basic levels to the most advanced.

Helping technical teams to develop their knowledge, knowing how to best utilize the most advanced diagnostics techniques and improve site performance through delivering accredit trainings and guiding them to the best practices.



**Vibration
Analysis**



**Thermal
Imaging**



**Machinery
Lubrication**



**Ultrasound
Testing**



**Turbo-
Machinery
Analysis**



**Machinery
Balancing**



**Shaft
Alignment**



**Asset
Reliability**

OUR PARTNERS





Thermal Imaging CAT I

ISO 18436 – IRT 1

Level I Certified Infrared Thermographer® is a five-day course for the application of qualitative thermal imaging for P/PM, Condition Assessment, Condition Monitoring, Quality Assurance, Forensic Investigations, and Building Sciences.

This course covers infrared theory, heat transfer concepts, equipment operation and selection, standards compliance, image analysis, and report generation.

Students are trained to identify and document thermal patterns caused by improper design, workmanship, or material failure. Specific applications include:

Electrical distribution systems, mechanical systems, steam systems, refractory systems, underground piping, active thermography, building envelopes, and flat roofs.

Infrared Thermography – CAT I Training Main Topics:

- Introduction to Thermal Imaging**
 - Course Overview , Overview of IR Applications
- Introduction to Infrared Theory**
 - Basic Infrared Theory & Thermal Imaging Systems, Heat Transfer Concepts
 - Emittance, Reflectance & Transmittance
- Thermal imaging camera (equipment) setup & operation**
 - Imager Operation & Selection
 - Selecting and Purchasing a Thermal Imager – What You Need to Know
- Infrared Thermography Program**
 - Nine Steps to Setting up an Infrared Program, Program Economics & Benefits
 - Recording Data & Images / Generating a Qualitative Report
 - Quick Start Procedure for Creating Reports in TI Reporter™
- Electrical Systems Inspection**
 - Infrared Inspection of Electrical Systems
 - 7 Common Electrical Defects Detectable by Thermography
- Mechanical Systems Inspection**
 - Infrared Inspection of Mechanical Systems
 - Steam and Fluid Systems
- Energy Loss**
 - Infrared Inspection for Energy Loss
 - Energy Loss – Radiation, Convection, Conduction
- Insulated Roofs Systems Inspection**
 - Infrared Inspection of Insulated Roofs
 - Standard for Infrared Inspection of Insulated Roofs



Infraspection Institute is recognized by the Society for Maintenance & Reliability Professionals (SMRP) as an approved provider of continuing education and training aligned with key subject areas related to reliability and physical asset management.





Gain Accredited Certification

All of MDI – Machinery Diagnostics Institute courses are ISO 18436-4 compliant and follow its standard.

Our accredited courses allow you to apply for certification exams of the most recognized certification providers worldwide – Infraspection Institute –

Infraspection Institute courses provide the best practical experience based on hundreds of case studies, learn all the tricks you need to do the job efficiently.



Acquire Hardcopy References

Acquire a textbook for your reference & bank of questions with answers on each training topic



Infraspection Institute

Infraspection Institute is the oldest independent infrared training and infrared certification firm in the world.

Founded in 1980, Infraspection Institute has trained and certified over 10,000 thermographers worldwide.

With over 40 years in business, Infraspection Institute literally pioneered the infrared training industry.



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