



# inspiredTraining

## Dates:

13-14 June 2012

## Register Today!

+32 2 510 61 89

## CEU Credits:

1.6 Credits

## Join Us!

[www.gpallied.com](http://www.gpallied.com)

Twitter: [twitter.com/#!/gpallied](https://twitter.com/#!/gpallied)

linkedin: [linkedin.com/company/gpallied](https://linkedin.com/company/gpallied)

## Mechanical Asset Health Management

The course provides skills which will allow attendees to understand the application and integration of basic Predictive Maintenance technologies. During this course, you will learn to:

- Identify mechanical failure modes;
- Determine what failure modes each technology can detect;
- Identify the common traps of each technology;
- Build a mechanical asset health matrix;
- Balance work flow maturity with coverage;
- Apply benchmark data and asset criticality to design the coverage model;
- Conduct a pm evaluation (pme) and use the results; and
- Write a good mechanical pm for those failure modes that cannot be detected.

## Who will join you?

This class is recommended for Managers, Engineers, Planners, and Supervisors who are responsible for the daily use of information that comes from a Condition Monitoring program.

## About the Lecturer

Lance Bisinger, CMRP, is the Operations Director for GPAllied. In this role, Lance supports the technical delivery efforts of all those in the field focused on our core consulting deliverables. Lance provides training, quality assurance, project start-up, and new product development.

Lance's experience and qualifications include machinery troubleshooting and problem solving; root cause failure analysis; shop and field balancing; reliability program evaluation, implementation, and management; quality control; quality assurance; and project management. Industries served include: electric power generation, food, grain, manufacturing, water treatment, extrusion, pharmaceutical, and chemical.

Lance designed a seminar integrating multiple technologies to Electrical assets and has designed and delivered training seminars on OEM specific products including: vibration data collector; vibration software; laser alignment systems; balancing; and electric motor diagnostics. He has also designed and trained others on: Electrical Best Practices for Managing Reliability with PdM Technologies; balancing theory; all levels of vibration analysis; roller bearing failure analysis; and electrical AC and DC motor application, analysis, and theory. Lance has trained operators in sensory inspections and other specific inspection techniques for various rotating equipment.

Lance served in the US Navy as an electrician onboard a nuclear submarine and has 21 years of experience in the field of maintenance and reliability. He is a CMRP through the Society for Maintenance and Reliability Professionals (SMRP), and his certifications include Thermography ASNT level I, Vibration ASNT level III, RCM Blitz™, and Apollo RCA.

Lance resides in Eastern Iowa with his wife and two daughters. In his spare time, he enjoys golfing, cooking, and water gardening.





# LEARNING IMPACT MAP – 2 Day Workshop

## inspiredTraining: Mechanical Asset Health Management

DAY ONE		
What will I learn?	What will I do with my training?	What will I gain from the training?
Identify Mechanical Failure Modes.	Evaluate your current maintenance strategy based on failure modes.	Improve the effectiveness of your maintenance strategy when implementing a failure modes based philosophy.
Describe the criteria for rationalizing the Equipment Maintenance Plan (EMP).	Utilize the rationalization criteria to develop or revise EMPs.	Assemble a consistent set of criteria applied to the development or revision of EMPs.
Understand how to utilize Enhanced Sensory Inspections.	Apply the sensory inspection tools and techniques to identify defects.	Create more effective equipment inspections by the workforce and an opportunity to involve plant operators.
Discuss the Theory, Application, and Common Traps of Mechanical Infrared Thermography.	Analyze the existing EMP focusing on opportunities to replace failure modes covered by time-based maintenance (PMs) with Mechanical Infrared Thermography.	Generate an EMP using less time-based maintenance (PMs) by adding Mechanical Infrared Thermography to cover applicable failure modes through an understanding of technology application and its limitations.
DAY TWO		
What will I learn?	What will I do with my training?	What will I gain from the training?
Discuss the Theory, Application, and Common Traps of Lubrication and Wear Debris.	Analyze the existing EMP focusing on opportunities to replace failure modes covered by time-based maintenance (PMs) with Lubrication and Wear Debris.	Generate an EMP using less time-based maintenance (PMs) by adding Lubrication and Wear Debris to cover applicable failure modes through an understanding of technology application and its limitations.
Discuss the Theory, Application, and Common Traps of Vibration Analysis.	Analyze the existing EMP focusing on opportunities to replace failure modes covered by time-based maintenance (PMs) with Vibration Analysis.	Generate an EMP using less time-based maintenance (PMs) by adding Vibration Analysis to cover applicable failure modes through an understanding of technology application and its limitations.
Discuss the Theory, Application, and Common Traps of Structure-borne Ultrasound.	Analyze the existing EMP focusing on opportunities to replace failure modes covered by time-based maintenance (PMs) with Structure-borne Ultrasound.	Generate an EMP using less time-based maintenance (PMs) by adding Structure-borne Ultrasound to cover applicable failure modes through an understanding of technology application and its limitations.
Discuss the Theory, Application, and Common Traps of Motor Current Signature Analysis.	Analyze the existing EMP focusing on opportunities to replace failure modes covered by time-based maintenance (PMs) with Motor Current Signature Analysis.	Generate an EMP using less time-based maintenance (PMs) by adding Motor Current Signature Analysis to cover applicable failure modes through an understanding of technology application and its limitations.