"Condition Based Monitoring"

October 11th-13th 2010

DEADLINE TO ENROLL IS September 10th!

Registration will be limited to the first 12 students that register!

http://www.opmug.net/

MAXIMIZING RELIABILITY
OPMUG
Oklahoma Predictive Maintenance Users Group

Autry Technology Center
1201 West Willow
Enid, OK 73703
580.242.2750

Located in the

Autry Technology Center
Enid, OK

careertech

MEMBER COSTS:

Oklahoma based company
Class: **$650**

Out-of-State Company:
Class: **$850**

Questions can be directed to Gene Burkett at Autry Tech 580-242-2750 x117

GP*Allied* INSPIRED.RELIABLE.GLOBAL

GP*Allied* is the premier global provider of sustainable transformation, driving improved operational and reliability excellence, and providing the right fit for your organization.

About the Course:
This course is designed to teach the fundamental principles of the five predictive maintenance technologies most prevalent in industry: vibration analysis, infrared thermography, airborne & structure-borne ultrasonics, oil analysis and motor circuit analysis.
Upon completion of the course, you will have an understanding of the capabilities of the technologies along with the common traps that may be encountered during application.

Attendees Will Receive:

- A Participants Guide & Technology Analysis Matrices

Who Should Attend This Course?

This course is for Managers, Engineers, Planners and Supervisors who are responsible for the daily use of information that comes from a condition monitoring program. The course provides skills which will allow attendees to understand the application and integration of basic predictive maintenance technologies.

Course Description

You will learn:

- How to strike the right balance between PM and PdM
- How to evaluate your PM program and eliminate unnecessary work
- The principles of PdM and the reasons why it's so powerful
- The business case and value proposition for PdM
- Where the resources will come from: 3 different strategies to consider and the pros and cons of each
- Why PM is not enough – the surprising truth behind 80% of all equipment failures
- How PdM reduces overtime and emergency work
- How PdM can increase the capacity of your plant without a dollar of capital investment
- How much PdM is enough – what you can learn from best practice organizations and benchmarks
- How to use LEAN tools to make your PdM program self-funding every step of the way – without increasing head count
- How to recognize when you have achieved best practice
- The common language of PdM – key terms and definitions you should know
- How to convert to the proactive workflow model and the key advantages it offers vs. the traditional model
- Asset health – what it is and how to measure it
- The right way to use assessments to measure the effectiveness of your program
- How to identify mechanical, electrical and stationary failure modes using PdM technologies
- How to identify the Common Traps of each technology
- How to build a comprehensive Asset Health Matrix
- How to balance workflow maturity with coverage

How to apply benchmark data and Asset Criticality to "design BENCHMARKING, BUSINESS CASE AND SUCCESS STORIES

1. Overall Equipment Effectiveness

STRIKING THE BALANCE BETWEEN PM and PDM

1. P-F Curve
    2. Weibull Shapes
    3. Correlation Models
    4. Preventive Maintenance Evaluation
    5. Asset Health

QUANTIFYING MECHANICAL ASSET HEALTH

1. Infrared Thermography
    2. Oil Analysis
    3. Airborne and Structure-borne Ultrasonics
    4. Vibration Analysis
    5. On-line Motor Circuit Analysis

QUANTIFYING ELECTRICAL ASSET HEALTH

1. Infrared Thermography
    2. Oil Analysis
    3. Airborne and Structure-borne Ultrasonics
    4. Vibration Analysis
    5. Off-line Motor Circuit Analysis

QUANTIFYING STATIONARY ASSET HEALTH

1. Infrared Thermography
    2. Airborne and Structure-borne Ultrasonics
    3. Pulse Echo Ultrasound
    4. Magnetic Particle Testing
    5. Penetrant Testing
    6. Visual Inspection
    7. Radiographic Testing
    8. Eddy Current Testing
    9. Special Methods

MAINTENANCE WORKFLOW MODEL

1. Reactive Maintenance Model
    2. Preventive Maintenance Model
    3. Proactive Workflow Model

ABOUT THE PRESENTER

Andy Page

Andy has 15 years in the maintenance and reliability field where he has played several different roles. First as a Maintenance Engineer for Noranda Aluminum where he was responsible for implementing a comprehensive PdM program and continuous improvements of the planning and scheduling function. Next he held the role of Regional Services Manager for CSI where he provided technical services to new customers and for the sales staff. After that he worked for Martin Marietta Aggregates as the Asset Reliability Manager responsible for PdM and maintenance improvement process effort across 23 plants in Ohio, Indiana and Michigan. Next he served as the Vice President – Operations for a small consulting firm called Reliability Solutions, Inc. in central Ohio providing PdM services primarily to the mining industry.

Andy is well grounded in reliability and maintenance engineering topics with particular emphasis on PdM technologies to include advanced experience in vibration analysis and ultrasonics and Level 2 certifications in infrared thermography and oil analysis.

****Cancellation Policy ****

A training class can be cancelled when, less than 75% funded and is less than 30 days from the start of class (training). In this case there will be a 100% fee refund for registered participants. If a registered participant cancels less than 10 days before the start of class (training) they will forfeit 50% of the registration fee.