

IN PARTNERSHIP WITH



Oklahoma Member Costs:

Registration: \$535
Exam: \$200

Out of State Member:

Registration: \$835
Exam: Call

Visit the OPMUG Website to Register for course

WWW.OPMUG.NET
Or call Gene at
(580) 242-2750 x117



Who Should Attend:

- Maintenance Managers
- Foremen
- Technicians
- Engineers

Anyone in the maintenance field

3-Day Training Event: “Machine Lubrication Level 1 Training”

March 31st -April 3rd 2009
8:00 am to 4:00 pm

Certification exam on the 3rd if desired

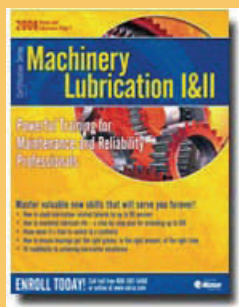
Hosted by



1201 W. Willow, Enid,OK

Instructor: Noria Inc. Tulsa, OK

If yours is like most companies, you're winging your way around lubrication. Your machines keep wearing out and breaking the same way because you keep lubricating them the same old way. And, you get frustrated because your lubricants should last longer but you don't know what to do. In these information packed courses, you'll discover how to build a world-class lubrication program and put an end to your lubrication frustrations



When you leave the seminar, you'll consider this free course manual indispensable to your job. Each manual includes copies of the seminar slides, worksheets and real-world case studies.

To register for exam, applicants MUST contact and pay directly to ICML (International Council for Machinery Lubrication) for MLT 1 (Machine Lubrication Technician Level 1)

Call (918) 259-2950 Ask for Suzy Jamison or Rosania Kloss

Machine Lubrication Level 1 Training Course Objectives

Level I

How Lubrication Affects Machine Reliability

- Financial benefits from achieving lubrication excellence
- Don't attempt reliability-centered maintenance (RCM) without the 5-I lubrication method
- Five equipment maintenance strategies, and when each applies
- Important implementation steps to lubrication excellence
- 10 roadblocks to achieving lubrication excellence

Lubrication Fundamentals

- Six important functions of lubricating oils
- How oils and greases are formulated and why it is important
- How friction is generated in lubricated machinery
- The importance of oil film thickness and critical clearances

Understanding Additives, Base Oils and Grease Thickeners

- How lubricant properties irreparably change
- Seven important physical properties of a base oil
- The importance of API's five base oil categories
- When to select one of the six most commonly used synthetic base oils
- How to use temperature to determine the right base oil for your machine
- How to select grease thickeners for your application

Lubricant Performance Properties

- 14 key additives that enhance lubricant performance
- Understanding viscosity grades, measurement, and reporting
- Why Viscosity Index is important and how it improves your work
- Lubricant performance tests and reporting – what you need to know
- How water contamination generates other contaminants
- How to control and eliminate aeration problems

Food-grade and Environmentally-friendly Lubricants

- Important USDA requirements and government regulations for food-grade lubricants
- What you need to know about food-grade additives, base oils and grease thickeners
- Advantages and disadvantages of food-grade lubricants

Lubricating Grease Application Methods

- Seven tips for avoiding incompatible grease mixtures
- Advantages and disadvantages of centralized lubrication systems
- Best practices for greasing motor bearings
- How to calculate greasing intervals and quantity
- Best practices for ultrasonic/sonic-based greasing
- Important tips for working with your motor rebuild shop

Lubricating Oil Application Methods

- Overview of oil lubrication methods and devices
- How to use oil mist and other automatic lubrication methods
- Using pressure spray methods for gearboxes
- Best practices for the maintenance of grease guns and fittings
- Overview of single-point direct lubrication systems

Selecting Lubricants

- Journal and rolling-element bearings
- Open and closed gears
- Gas engine and gas compressors
- Air compressors
- Hydraulic fluids
- Steam and gas turbines
- Process pumps
- Multipurpose grease
- Oil mist lubricants

Contamination Control

- Building reliability through contamination control
- Seven most destructive contaminants and how to control them
- Three steps to proactive maintenance
- Understanding the ISO Solid Contaminant Code
- 10 ways to maximize filter cart usage

Oil Drains, Flushing, and Reservoir Management

- How to optimize and extend oil change intervals
- Interval vs. condition-based oil change
- How to monitor lubricant consumption
- Best practices for oil changes
- How and when to perform a flush
- Selecting appropriate cleaning and flushing procedures

Storage, Handling, and Managing Lubricants

- How to set up a world-class lube room
- How to optimize lubricant selection/procurement
- How to implement a lubricant consolidation program and select suppliers
- Best practices for inspecting/testing new lubricants
- Used lubricant storage, handling, and disposal best practices

Design and Inspect for Lube Excellence

- World-class strategies for accessorizing equipment for lubrication excellence
- Seven critical accessories for inspection and sampling
- Seven critical accessories for contamination control prevention
- Eight essential lubrication accessories
- What your breather is telling you about your machine

Used Oil Analysis Basics

- When to use 11 common used oil analysis tests
- Oil sampling best practices
- Oil analysis for condition-based oil changes
- Detecting and analyzing machine wear debris
- Easy field tests for quick inspections

Essential Field Inspections

- 12 questions your filter will answer about your machine
- Which visual inspections can provide big results
- Quick tips for using scent, sound, and touch to inspect lubricants

Registration will be limited to the first 10 OPMUG members that register. Attendees will receive a Certificate of Completion with credit for contact and professional hours. Register on this website to reserve a seat for this session <http://www.opmug.net/>



3614 W. Owen K Garriott Rd.
Enid, Oklahoma 73703
(580) 234-6800

HOTEL INFORMATION



4702 W. Garriott Rd.
Enid, OK 73703
580-237-7722

**** Course 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.