



MASTERING LUBRICATION MANAGEMENT

Learn how to implement Best Practices
and get your lubrication management to
World Class standards.

An interactive training course designed to
help you:

- understand the fundamentals of
lubrication and oil analysis
- get more out of your lubrication
strategy
- improve your oil analysis success
- increase reliability
- increase profits and turnover
- improve your quality goals
- improve your health & safety success
- reduce your environmental impact
- ensure compliance with ISO9001:2000

1st—4th November

2010,

Ellesmere Port,

Cheshire



Who Should Attend?

- Plant Managers
- Operations Managers
- Plant Engineers
- Reliability Engineers
- Lubrication Technicians
- Oil Analysis Practitioners
- Condition Monitoring Specialists
- Plant Operators
- Maintenance Technicians

Whatever your industry, if you are involved in some way with lubricants, this course is for you!

Meet Your Expert Course Leader



Martin Williamson is a graduate Mechanical Engineer from the University of Cape Town and began his maintenance career working in the mining industry. This experience included condition monitoring with a focus on oil analysis and Tribology. In 1994, Martin joined Pall Filtration and provided technical support on their contamination monitoring instruments to clients in a variety of industries. He later joined Entek IRD to work in product management of their oil analysis tools, as well as providing a technical support role including training on oil analysis to international clients. For the last 10 years, he has been presenting training classes and undertaking consulting projects on an international level on behalf of Noria Corp and other key clients such as BP, Dow Corning, Marathon Oil and Cargill. He attained his CMRP (Certified Maintenance & Reliability Professional) status with SMRP (Society for Maintenance & Reliability Professionals) and has been involved with ICML (International Council for Machinery Lubrication), as well as working on various related ISO working groups. Martin is currently managing director of KEW Engineering Ltd.

Welcome to our new course for 2010...

...KEW Engineering Ltd is pleased to announce our new course with a reliability focus, "*Mastering Lubrication Management*".

This course, based on my experience, is targeted at helping your company's reliability drive in the areas of lubrication, oil analysis and contamination control.

The course not only covers the fundamentals, but provides best practice solutions to ensure your plant achieves world class levels in lubrication management.

The first part will address lubricant theory, covering the basics of oil and grease and the mechanics of lubrication regimes. This section will help you understand how to correctly choose the right lubricants with an explanation on understanding the Lubricant Technical Data Sheet.

The second part covers oil analysis and addresses the reliability focus, as well as explaining best practice sampling, testing, setting alarms and limits, and data interpretation. This section will also include basic on-site testing and how to improve your relationship with a commercial oil analysis laboratory.

The third part will be of immense practical value, focusing on achieving success through contamination control and lubrication management. This will cover issues relating to machine specification and filtration, as well as best practice strategy on storage, handling and dispensing lubricants.

The course is designed to be interactive, and attendees will be encouraged to participate with questions and discussion. Worked examples and Case Studies will be a key part in this training.

If you can't make the date in June, please talk to us about our other planned public courses or our on-site training packages that can be customised to suit your needs.

I look forward to having you join our course.

Martin Williamson B.Sc. SMRP, MLA2, MLT1



Get Qualified!

A qualification from ICML will aid compliance with your company 's ISO 9001:2000 Quality management systems - Requirements for training and qualification of personnel.



The International Council for Machinery Lubrication, offering examinations which comply with the latest international standard ISO 18436-4:2008 Condition monitoring and diagnostics of machines -- Requirements for qualification and assessment of personnel -- Part 4: Field lubricant analysis.

Examination - Friday, 5th November 2010, at 9.00am
Register online at for your MLT1/MLA1/MLA2 exams at:

www.lubecouncil.org

What past attendees thought:

“ An excellent, informative presentation. Very well explained, with easy to follow manual. Invaluable for our new mission! ”
Ray Young, Reliability Technician, Petrofac.

“ Very enjoyable course, found content to be very relevant & instructor very knowledgeable on course content. ”
Russell Parry, Reliability Eng., AV Technology

“ The course was 1st class & highlighted how far we have to go before achieving a good quality lubrication programme. ”
Colin Sample, Reliability Supervisor, Marathon Oil

“ Small details are important. I used to neglect this. Not anymore! ”
Wong Ik Yeang, Operator, Sarawak Energy

“ Very informative & enlightening course. Well presented and well experienced presenter.”
Noel P. Macatangay, Mech. Eng., ADGAS

Course Content

The role of Lubrication & Oil Analysis in Reliability

- Maintenance strategies
- Maintenance PM benefits
- Reliability benefits
- Productivity benefits
- Financial benefits
- Competing in the global marketplace
- Ensuring compliance in Health & Safety, ISO9000/14000/Responsible Care etc
- Improved Health & Safety and Environmental performance

Theory of Lubrication to include:

- Wear mechanisms (adhesive, abrasive, surface fatigue)
- Functions of a lubricant
- Lubrication regimes (boundary and thick film)
- Base stock options (mineral, semi-synthetic, synthetic and vegetable base)
- Additives and their functions
- Greases (basestocks, additives and thickeners)
- Addressing some common myths about oils such as cross-mixing, aftermarket additives, service life etc.

Understanding a Lubrication Technical Data Sheet

- A guide to interpreting the information
- Understanding the ASTM/ISO/API/SAE specifications and test procedures.

The role of Oil Analysis in a Reliability Programme

- Understanding oil analysis reports
- When to apply oil analysis
- Selecting when to use laboratory analysis, on-site analysis or online sensor technology
- Bottle sampling procedures for accurate laboratory analysis
- Lubricant condition monitoring (viscosity, AN/BN, oxidation and additive depletion)
- Contaminant monitoring (particles, moisture, fuel, soot and glycol)
- Machine health monitoring (elemental analysis, wear debris analysis and ferrography)
- Applying proactive and predictive targets and limits
- Choosing relevant tests
- Selecting oil analysis product and service providers
- Selecting diagnostic tools for machine and lubricant health checks
- Contamination awareness - measuring & monitoring.

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Course Details

- 1st — 4th November 2010
- The National Waterways Museum, Ellesmere Port, Cheshire.
- £1,195.00 per person exc. VAT
- Group discounts available.
- ICML Exam fee - US\$200.00

Course Activities

As part of the 4-day event, there will also be:

- A workshop session
- A visit to a world-class Lubricants Store
- An evening meal
- A chance to meet our supporting partner companies who can all help you achieve World Class standards



Course Content Continued:

Applying Best Practice

- Implementing contamination control
- Setting cleanliness targets
- Case studies and success stories
- Storage, handling and dispensing best practices
- Applying contamination control for machine protection
- Filtration technology
- Seal technology
- Dehydration technology

Machinery Specific Lubrication

- Bearings and greasing practices
- Gearboxes
- Hydraulics
- Compressors
- Turbines
- Chains
- Engines
- Extending oil service life – bleed & feed

Please call for more information or to book your place on the course:

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