

Hands On Lubrication Basics

Clean Lube Solutions provides expert training, products and services for the lubrication maintenance and management needs of mining, energy, milling and heavy manufacturing industries.

COURSE AIM

This course is specifically designed to provide personnel with a basic understanding of lubricant properties and practices, contamination control and oil analysis. After attending this course personnel will also be able to demonstrate safe and accurate lubrication and oil sampling techniques.

COURSE STRUCTURE

This course is a mix of theory and practical with training exercises and demonstrations and includes interactive presentations as well as hands on activities.

COURSE CONTENT (details on page 2)

ATTENDANCE

Lubrication Technicians, Reliability Engineers, Mechanical Fitters, Condition Monitoring Personnel, Maintenance Supervisors & Team Leaders, Machine Operators & Maintenance Personnel

DURATION

2 Days, with appropriate breaks

YOUR TRAINER—Keith Nicholson



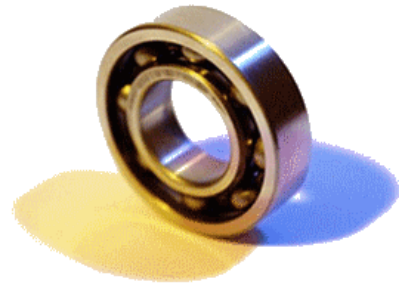
Keith has over 20 years experience in the industrial fluid power and lubrication industries and is dedicated to sharing his sound understanding of, and passion for, lubrication management for heavy industry. With experience gained from a career with companies including RAAF, Pall Filtration, Shell Services & Hydac he now runs his own business, Clean Lube Solutions, which provides specialised lubrication training, products and services to enhance the predictive maintenance needs of major companies within a wide range of industries throughout both Australia and overseas.

Keith is based in Brisbane and has qualifications in Technology & Engineering, Certificate 4 in Training & Assessment & has published several technical articles & case studies as well as presenting at national

Clean Lube Solutions carries out a range of on-site hydrocarbon training courses that are designed around your site operations and specific requirements.

We are a hydrocarbon management company that is focused on supplying your vital training requirements where they are most needed and to personnel who are in most need of them.

Our courses may be customized to your specific industry needs and may be booked to be held onsite (sufficient numbers required) or at one of our planned classes held in major and regional cities throughout the year.



COURSE NUMBERS

As required, a maximum of 15 per course is recommended due to practical exercises.

COURSE MATERIAL

A course manual is supplied to all attendees.

ASSESSMENT

Successful achievement will involve completion of the practical exercises and a pass in a theory exam.

CERTIFICATION

A course certificate is presented upon successful completion

Please contact Clean Lube Solutions to enquire about upcoming courses near you.



For more information on any of our products, services or training courses please visit us online at:

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07 3800 9444
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3/ 78-80 Eastern Rd
Browns Plains, Qld 4280, Australia

ABN: 67 116 189 701

Hands On Lubrication Basics

Course Content

This workshop is aimed at providing participants with the skills and knowledge to enable understanding of:

THE IMPORTANCE OF LUBRICATION

Lubrication costs, maintenance strategies, machinery failure, changing the way we go about business, contamination control approach, importance of the lube tech

LUBRICATION MECHANISMS

Primary purpose of lubricants, the three mechanisms of lubrication

GEARS

Introduction to gear types and their importance to lubrication

BEARINGS

Introduction to bearings types and their importance to lubrication

LUBRICATING OILS

Introduction to lubricating oils. Functions of a lubricant, base oils, additives, characteristics, types, manufacturing

GREASE

Introduction to grease. Composition, base oils, thickeners, additives, types, grease vs oil, selection

HAND GREASING OF BEARINGS

Use of hand grease guns, ultrasonic, application, grease quantities & frequencies, greasing of electric motors

TYPES OF GREASE SYSTEMS & INSPECTIONS

Why use auto lube systems, SPL's, single line progressive, single line parallel, dual line parallel, service & maintenance

SAFETY, STORAGE, HANDLING & THE ENVIRONMENT

Hydrocarbon classes, equipment storage, lube storage, bacteria growth, storage life



CONTAMINATION CONTROL FUNDAMENTALS

Causes of premature failure, total contamination control, sources of contamination, ISO Cleanliness Code, patch testing

FILTRATION

Performance ratings, filter housing & element design, media types, breathers, filter trolleys

THE LUBE ROOM

Considerations before starting a lube room, attributes of a good lube room, case study

WATER CONTAMINATION

Problems associated with water, bearing life extension, methods of removal, methods of detection

OIL SAMPLING

Reasons for sampling, sampling locations & fittings, in-line sampling, vacuum pump sampling, gearbox sampling

SYSTEM INSPECTIONS

Visual & performance inspections, examples

LUBRICATION MANAGEMENT PRACTICES

Methodology, items to be viewed

CASE STUDIES

Examples of site lube rooms & systems & improvements to be made, case studies

EXAM & COURSE EVALUATION

A course certificate is presented on successful completion

Clean Lube Solutions' training courses are designed to assist organisations with their journey towards best practice in fluid management and incorporate vital steps to introduce and carry out a world class Total Fluid Management Program. Ongoing training and knowledge improvement is helping to achieve a safe, contaminant free lubrication environment within heavy industrial companies throughout Australia and the world.

WHO SHOULD ATTEND?

Condition Monitoring Personnel Maintenance Supervisors & Team Leaders
Machine Operators & Maintenance Personnel
Lubrication Technicians Reliability Engineers Mechanical Fitters

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