



# Practical Hydraulic Systems Operation And Troubleshooting



## Introduction:

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Whatever your hydraulic applications, you can increase your knowledge of the fundamentals, improve your maintenance programs and become an excellent trouble-shooter of problems in this area by attending this information packed course. Cutaways of all major components are brought to the sessions to visually demonstrate the components' construction and operation. Developing an understanding of "How" it works leads to an understanding of how and why it fails. Multimedia views of the equipment are given to give you as realistic a view of hydraulic systems as possible.

The Hydraulics workshop is a comprehensive, highly practical and interactive five-day course. You will have an opportunity to discuss Hydraulic Systems construction, design-applications, operations, maintenance, and management issues and be provided with the most up-to-date information and Best Practice in dealing with the subject. Towards the end of the workshop, you will have developed the skills and ability to recognise and solve hydraulic problems in a structured and confident manner.

## Who Should Attend?

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- Operation, maintenance, inspection & repair managers, supervisors & engineers
- Plant engineers
- Plant operations and maintenance personnel
- Mechanical engineers and technicians
- Design engineers, Consulting engineers
- Process technicians

## Course Objectives:

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- Analyze and explain the purpose of hydraulics
- Examine and describe how mobile hydraulic systems and components operate
- Demonstrate the ability to properly disassemble and reassemble hydraulic components
- Prepare written records of repairs and lab activities including the evaluation of hydraulic components used in class
- Use accepted industry tools and procedures to diagnose problems and assess the serviceability of hydraulic systems
- Demonstrate the ability to read and understand International Organization for Standardization (ISO) hydraulic schematics
- Evaluate and perform required maintenance on mobile hydraulic systems.

## Course Outline:

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Attending the highly practical five-day workshop will enable you to:

- Work with basic hydraulic components
- Understand how basic hydraulic components function in a hydraulic circuit

- Read hydraulic schematics
- Work safely with hydraulic components and systems
- Troubleshoot simple hydraulics problems
- Apply a simple preventative maintenance program to lengthen hydraulic components life
- Make simple repairs to hydraulic systems
- Identify hydraulic systems components
- Understand essential hydraulic terms and understand their key applications
- Recognise the impact hydraulic fluids have on components
- Discuss the correct operation, control sequences and procedures for the safe operation of various simple hydraulic system
- Initiate an effective inspection and maintenance program
- Minimise forced outages and prevent serious damage to hydraulic equipment
- Outline the latest technologies available for electro hydraulic systems