Practical

PUMPS AND COMPRESSORS: Control, Operation, Maintenance and Troubleshooting

YOU WILL LEARN HOW TO:

- Explain and understand pump/compressor terminology
- Identify the various types of pumps/compressors
- Understand pump/compressor characteristics and interpret pump/compressor curves
- Understand Pump/Compressor Types and Classification
- Understand Criteria for Pump/Compressor Selection
- Perform a number of simple pump/compressor calculations
- Confidently test and commission pump/compressor sets
- Explain how Pumps/Compressors are Constructed
- Detail how to Install, Test and Commission Pump/Compressor Systems
- Explain how to start up a New Pump/Compressor or one after Strip Down for Maintenance

WHO SHOULD ATTEND:

- Plant Operations and Maintenance Personnel
- Consulting Engineers
- Design Engineers
- Process Technicians
- Plant Engineering Managers and Supervisors
- Process Control Engineers and Supervisors
- Mechanical Engineers
- Pump/Compressor Sales Engineers
- Pump/Compressor Service Contractors
- Pump/Compressor Operators
- Plant Engineers

Technology Training that Works
THE WORKSHOP

The Pumps and Compressor workshop is a comprehensive course focusing on the fundamentals of centrifugal pumps and compressors. You will have an opportunity to discuss Pump/Compressor 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 simple pump/compressor problems in a structured and confident manner. This is not an advanced course but one focussing on the fundamentals and therefore will not be suitable for you if you are a pump or compressor “guru”!

ON-SITE TRAINING

✔ SAVE over 50% by having an IDC workshop presented at your premises.
✔ Customise the training to YOUR workplace.
✔ Have the training delivered when and where you need it.

Contact us for a FREE proposal.

THE PROGRAM

DAY ONE

INTRODUCTION
• What constitutes a good pump/compressor or compressor
• Safety
• Reliability
• Efficiency
• Risk consideration
• Life cycle cost consideration
• Overview of Statutory requirements

CENTRIFUGAL PUMP DESIGN AND CONSTRUCTION
• Casings
• Impellers
• Axial/Radial forces
• Pump/compressor Shafts
• Shaft seals - Balanced/Unbalances, Seal Wear Patterns
• Drives and Couplings
• Supports and Pipe connections
• Auxiliaries

DAY TWO

INTRODUCTION TO COMPRESSORS
• What is a compressor
• Basic criteria for compressor selection
• Compressor definitions

RECIPIROCATING COMPRESSORS
• Principles and mechanics
• Definitions
• Parts of a reciprocating compressor
• Maintenance of reciprocating compressors
• Performance of reciprocating compressors
• Mechanical forces

CENTRIFUGAL COMPRESSORS
• Introduction
• Principle of operation
• Operation
• Parts of Centrifugal compressors
• Casing configurations
• Types of compressors
• Performance of centrifugal compressor
• Polytropic compressor
• Characteristic curves
• Compressor Controls

SUMMARY, OPEN FORUM AND CLOSING