



Mechanical Technology Training

Page 1 of 4

Roxby Training Solutions Ltd, Unit 4 John Clark Centre, Dockside Road,
Middlesbrough TS6 6UZ
Telephone: 01642 438700

Fax: 01642 46687 j.dean@roxby.com or r.mellor@roxby.com

INTRODUCTION

Moving parts usually require some form of lubrication and learning outcome one examines lubricant types and lubrication systems.

Pressurised systems often require seals and gaskets to contain the lubricants and other working fluids. Rotating parts require bearings and mechanical systems incorporate fixing devices to hold the various components in position. A range of seals, bearings and fastenings is examined in learning outcome two.

A prime purpose of mechanical systems is to transmit motion and power. There are many ways in which this can be achieved and learning outcome three examines a range of power transmission systems and components.

In learning outcome four learners are introduced to a range of plant equipment and systems. This includes an overview of hydraulic and pneumatic systems, steam plant, refrigeration and air conditioning plant and mechanical handling equipment.

COURSE CONTENT

Aim

This unit aims to give learners knowledge of the components and systems commonly used in lubrication systems, transmissions and plant equipment.

The general aim of this unit is to broaden and extend learners' practical knowledge of mechanical engineering systems and provide a foundation for continuing work in related units.

Pre-requisites

None required, although experience of Mechanical Engineering is beneficial.

Course Duration

The course is 2 days in duration.

Optimum Number

A maximum of 6 delegates per course.

Training Aids

PowerPoint slides & manuals, practice questions and assessment.

Learning Outcomes, on completion of this unit a learner should:

- Gain an understanding of the purposes and uses of lubricants and lubrication systems.
- Gain an understanding of the uses and applications of a range of engineering components.
- Gain an understanding of the uses and operation of mechanical power transmission systems.
- Gain an understanding of the uses and operation of plant equipment and systems.

Assessment and Certification

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit.

A Roxby Certificate will be issued upon successful completion.

COURSE SYLLABUS

Learn about the purposes and uses of lubricants and lubrication systems:

- Lubricant purposes and types
- Lubrication systems and maintenance
- Applications

Learn about the uses and applications of a range of engineering components:

- Seals
- Bearings
- Gaskets
- Fastenings
- Applications

Learn about the uses and operation of mechanical power transmission systems:

- Cams
- Belt, chain and gear drives
- Transmission shafts, clutches and brakes

Learn about the uses and operation of plant equipment and systems:

- Actuation and handling systems: pneumatic and hydraulic actuation systems
- Plant and process operations
- Mechanical handling systems
- Steam air conditioning plant service systems

Dates available on request

Page 4 of 4

Roxby Training Solutions Ltd, Unit 4 John Clark Centre, Dockside Road,
Middlesbrough TS6 6UZ
Telephone: 01642 438700
Fax: 01642 466879 j.dean@roxby.com or r.mellor@roxby.com