



Assembling & Testing Fluid Power Systems Training

Page 1 of 4

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

INTRODUCTION

This unit forms part of a series of learning packages. These packages link in with online material and self-assessment exercises. These packages test the learners' knowledge and skills on completion and will help the learner to obtain an industrial standard.

COURSE CONTENT

Aim

This unit aims to give learners knowledge of how to assemble and test fluid power systems.

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 basic principles of fluid power*
- *Understand fluid power system circuits, drawings and diagrams*
- *Gain an understanding of how to install fluid power components*
- *Understand how to work safely with pneumatic systems*

- *Understand how to fit and test pneumatic components*
- *Gain an understanding of how to work safely with hydraulic systems*
- *Gain an understanding of how to fit and test hydraulic components*
- *Understand how to work safely with vacuum systems*
- *Gain an understanding of how to work with vacuum system components*

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 basic principles of fluid power:

- *Identify pressures and force*
- *Fluid flow and basic calculations*
- *Fluid flow patterns and effects on pipework*

Understand fluid power system circuits, drawings and diagrams

- *Circuit symbols and diagrams*

Learn how to install fluid power components

- *Positioning and choice of components for design system*
- *Safely install components using tools and equipment*

Learn how to work safely with pneumatic systems

- *To include regulations that cover pressure systems*
- *Codes of practice and guidelines*
- *PPE*

- *Safe working practices and procedures*

Learn how to fit pneumatic components

- *Identify pneumatic system components to include actuators, pneumatic valves and flow control equipment*
- *Safely connecting components*
- *Testing pneumatics systems*

Learn how to work safely with Hydraulic systems

- *To include regulations that cover pressure systems*
- *Codes of practice and guidelines*
- *PPE*
- *Safe working practices and procedures*

Learn how to fit Hydraulic components

- *Identify hydraulic system components to include actuators, hydraulic valves and flow control equipment*
- *Safely connecting components*
- *Testing hydraulic systems*

Learn how to work safely with Vacuum systems

- *To include regulations that cover pressure systems*
- *Codes of practice and guidelines*
- *PPE*
- *Safe working practices and procedures*

Learn how to fit Vacuum components

- *Identify vacuum system components to*
- *Safely connecting components*
- *Testing vacuum systems*

Dates available on request