

Maintenance Hydraulics

Course Code: MH

Bosch Rexroth, St Neots*

Aims

- › To impart a basic understanding of maintenance hydraulics
- › To increase the knowledge of personnel who are actively engaged on the repair and maintenance of hydraulic systems
- › To allow participants to become familiar with fluid power technologies such as pump flow, cylinder speed, forces and pipe sizes
- › Introduce basic hydraulic theory in a practical way
- › To increase the knowledge of personnel in maintenance and fault-finding techniques associated with hydraulic systems
- › To enable participants to understand their specific hydraulic installation and circuit diagrams
- › To gain hands-on experience of building, fault-finding and optimising hydraulic circuits using our range of specially designed training rigs
- › To introduce participants to proportional control, optimising and fault-finding

Course Content

Day one

- › Basic hydraulic principles
- › Hydraulic symbols and circuit notations
- › Pressure control valves and associated circuitry
- › Relief valves and pressure reducing valves
- › Sequence valves and counter balance/overcentre valves
- › Flow control valves and associated circuitry
- › Simple throttle valves
- › Pressure/temperature compensated units
- › Direction control valves and associated circuitry
- › Direct operated spool valves
- › Two stage spool valves
- › Poppet valves and logic cartridge elements

Day two

- › Check valves - type and applications
- › Pump and pump control systems
- › Pump types and operating principles
- › Methods of control/application
- › Accumulator types and application
- › Hydraulic motors and actuators
- › Type and operating principles
- › Methods of control and application

Day three

- › Total cleanliness control
- › Hydraulic fluids, good housekeeping
- › Maintenance and trouble shooting techniques
- › Practical hands-on exercises

Day four

- › Introduction to Proportional Control
- › Factory Tour

St Neots

3.5 days

16 - 19 February

16 - 19 March

20 - 23 April

17 - 20 August

21 - 24 September

*Note:

This course is also run each month on behalf of Bosch Rexroth by Aberdeen Hydraulics (this is a 3 day course) See Course Schedule for dates

Pre-requisites

- › No previous knowledge required

Participants

- › Maintenance Engineers
- › Project Engineers
- › Technical Personnel
- › Sales Personnel