

Hydraulic Circuits

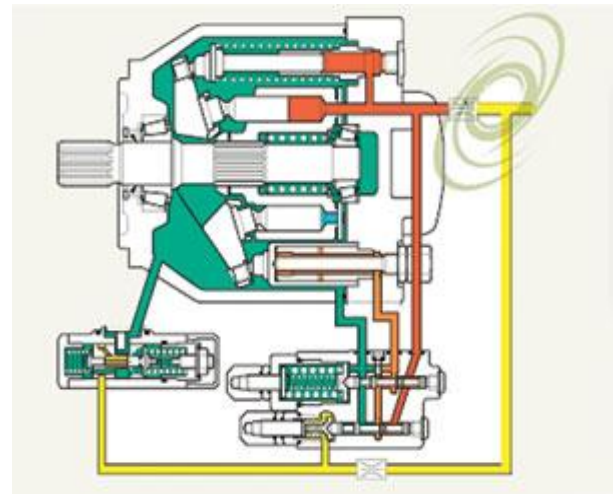
Z MEC-060

Duration :

Three Days 18 Hours

Who Should Attend :

Operators, Technicians, Maintenance personnel and engineers in the fields of: Oil industries, Gas turbine plants Electricity and water authority and Chemical processing industries



Language :

Arabic, English

Overview

The aim of this course is to provide the trainees with a sound, basic background in the field of hydraulic circuits. As such, this course covers those subjects essential to understanding the design analysis, operation and maintenance of hydraulic circuits. Theory is presented where desirable but the emphasis is placed on understanding how and why hydraulic circuits operate and on practical applications as well. Maintenance and troubleshooting of some hydraulic circuits will be covered in details

Topics

- Basic Components of any Hydraulic Circuit
 - Hydraulic fluids and tanks
 - Pipes and fittings
 - Hydraulic pumps
 - control valves
 - Actuators cylinders and motors
 - An application to a simple hydraulic circuit
- Tanks and Hydraulic Fluids
 - Design of tanks
 - Fluid properties and testing
- Hydraulic Pumps Types of Pumps
 - Gear pumps
 - Vane pumps
 - Piston pumps
- Hydraulic Actuators
 - Hydraulic cylinders and limited rotation actuator
 - Hydraulic motors gear motors, vane motors

- piston motors
 - Hydrostatic transmissions
- Control Valves
 - Directional - control valves
 - flow control valves
 - Pressure control valves
- Accessories
 - Accumulators
 - Pressure intensifiers
- Applications: hydraulic presses, loaders cranes, hoists, etc
- Maintenance and troubleshooting