

Hydraulics Arm Course Content

Overview : the branch of science and technology concerned with the conveyance of liquids through pipes and channels, especially as a source of mechanical force or control.

Day 1

Session 1 :

- Relief valves, Un-loader valves and principle, Pressure compensation (constant pressure),
- Load sensing, Open circuit applications
- The use and application of accumulators and safety blocks
- Installation and Commissioning procedures

Session 2 :

- Causes of pump failure (preventative measures)
- Health and performance monitoring (testing)
- Control Valves involving pressure, flow and direction
- Valve sizing and performance (spool and poppet)
- Logic cartridge elements and associated circuitry

Day 2

Session 1:

- Proportional hydraulics
- Load holding and motion control (cylinder and motor applications)
- Hydraulic motor and cylinder performance
- Fixed displacement motors
- Logical troubleshooting techniques
- Practical hydraulics on full range of electro-hydraulic training rigs
- Health and safety linked to risk management

Session 2 : (Project)

- Model Making

Session 3 :

- Competition
- Certificate Distribution