

PPM

Piston Pumps, Motors and Controls – 5 days

Advanced plant maintenance technicians and hydraulic system designers develop their knowledge of popular variable displacement pumps and pump controls used in open, closed and semi-closed loop pumping systems.

What you will learn –

- Types and characteristics of variable displacement pumps and motors
- Types and characteristics of open loop pump controls including proportional controls for pumps
- Types and characteristics of closed pump controls including proportional controls for pumps and motors
- Commissioning, set-up and troubleshooting of open and closed loop pump systems
- Sizing pumps to meet the flow requirements and pressure requirements of the hydraulic system
- Sizing motors to meet the speed requirements and torque requirements of the drive output
- Pump suction inlet condition requirements and calculations
- Pump case drain pressures
- Applying pumps with through-drives and calculating the limitations for through-drive pumps
- Understanding how adverse operating conditions and improper sizing can limit pump life
- Hydraulic fluid cleanliness and condition requirements for pumps
- Pump commissioning, setup, control adjustment and troubleshooting

This 5 day training course develops the student's knowledge of the internal operation of popular variable displacement pumps and motors and the operation / setup of various available controls. The device models and control types will be those as would typically be found in industrial applications. Maintenance technicians can use the information presented to insure pump performance and to provide good pump life. Engineering personnel develop their knowledge of proper pump/motor and control selection and component sizing.

Prerequisites: BIH and MRS/DCH or equivalent knowledge

Classroom lecture, discussions, laboratory exercises and lab demonstrations