

Pump System Fundamentals

Course Outline

Pump and System Fundamentals 1 Day Course Outline

- Introduction to Pump systems
- Pump system energy consumption
 - Pump output power exercise
 - Pump input power exercise
 - Motor input power exercise
- Pump Total Head
 - Total head calculation exercise
- Pump & System Curves
 - Measuring the system curve exercise
- Varying the operating point
- Control methods
 - Hydraulic loss due to throttling exercise
- Parallel and series pumping
- Rotodynamic pump fundamentals
 - Specific speed and attainable efficiency exercise
- Positive displacement pump fundamentals
- Factors the impact efficiency and reliability
 - Net Positive Suction Head exercise 1
 - Net Positive Suction Head exercise 2
 - Suction specific speed exercise
- Valves
- Motors
 - Pump efficiency calculation exercise
- Variable frequency drives