



**Pumps & Ancillary Equipment Engineering Selection  
in Oil & Gas Production  
PFE02**



**Oil & Gas  
Consultancy Services & Technical Training Providers**

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# Pumps & Ancillary Equipment Engineering Selection in Oil & Gas Production (PFE02)

## Course Contents:

1. Fundamentals of Pump for Fluid Transfer – Fundamentals and principles of fluid flow, fluid properties (viscosity, solids, multiphase flow, high pressure efficiency etc), Pressure and horse power considerations and applications.
2. Pumps Types (Reciprocating & Non-reciprocating) – Rotary pumps, Reciprocating pumps, Metering Pumps, etc Application and properties of each type.
3. Selection considerations – fluid characteristics, process condition (efficiency demands and how they affect selection, pressure capabilities), measurement and flow control
4. Axial Piston Principle - The basis principles behind axial pistons, what are the differences between this and other piston pumps, limitations, advantages and disadvantages.
5. Linear & Non - Linear Electric Submersible Pumps
6. Heat Dissipation & the Pump Efficiency – heat management, cooling, flow capacity and efficiency requirements
7. Pump Selection for metering, injecting and transferring various chemicals, additives and other hard-to-handle fluids into production pipeline systems, gas wells and oil wells.
8. Key Factors for Rating Pumps Proven performance
  - Flow Performance (constant or Irregular)
9. Corrosion resistance
  - Pulsation (Low or High) – the use of pulsation dampeners,
  - ATEX-approved models – the importance of product test, assessments and inspection and the use of ATEX or approved equipment
  - Flow range (Wide or Narrow) – efficiency of flow meter, importance of selection of non-corrosive flow meter
  - Pumped fluid lubrication – effect of pumped fluid lubricating qualities on equipment
10. API Standards e.g. API-674
  - Operations databasing and cataloguing – importance of standards maintenance

## Who Should Attend?

- Mechanical Engineers
- Pipeline Engineers
- Maintenance Engineers & Technicians

### Venue:

Please visit our website or contact us for details.

### Tuition:

£2,750 +VAT

5 day program

5 easy ways to  
register or to  
make an enquiry:

1.Web

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