



Progressing Cavity Pumps (PCP)



Course Description:

Recently, Progressing Cavity Pump is playing a significant role in oil production. PCP has a plenty of benefits compared to other artificial lift such as high efficiency, higher tolerance to sand or solid, less energy consumption, less capex and opex etc. All components of the PCP system, design - applications and solutions for problems will be described and discuss in detail. The participants of the course will learn the function of components, rig operation for PCP and especially design and selection of pumps. In each topic during course, the field experience and observations will be shared to evaluate of problems. The goal of this course is to provide best design and solutions for PCP. Upon completion of the course, trainees will learn to contribute to PCP system with less operational expense.

Who Should Attend?

- Engineers
- Field technicians
- Staff responsible for design, selection, operation, maintenance and analysis of PCP systems

Course Objectives:

- Identifying of the PCP system, sub-component and assemblies
- Demonstrating the advantages, limitations, and applications of PCP systems compare to other artificial lift methods
- Discussing PCP principles and surface drive system
- Providing knowledge on design and selection a PCP system
- Analyzing failure and troubleshooting for PCP systems
- Using best solutions to enhance system life

Course Outline:

Day 1

- Introduction to artificial lift and progressing cavity pump (PCP)
- Description of all components of the PCP
- Demonstration advantages, limitations, and applications of PCP

Day 2

- Surface Equipment
- Variable Speed Driver (VSD)
- Elastomers for PCP systems

Day 3

- PCP System design and applications
- Calculation and troubleshooting tools.
- Pump, electric drive selection

Day 4

Best Technology Solutions (BTS)

Training Program

- Complimentary components and equipment
- Solutions for harsh well and other conditions

Day 5

- Basic optimizations & troubleshooting
- Basic failure analysis