Training - Artificial Lift: Pumping

APOMP-EN-P | Face-to-face only | 5 days

This course provides a comprehensive, practical knowledge of rod and centrifugal pumping concepts, design, operations and potential problems

Level
Skilled

Public
E&P professionals involved in operating wells using sucker rod or centrifugal pumping

Objectives
Attendees will be able to implement the following skills:

- identify need for artificial lift
- select the most-suited pumping method
- design SRP & ESP pumps
- analyze operating conditions
- improve well performance and manage equipment lifetime

Pedagogical & technical resources

- Exercises on equipment calculation
- Numerous animations and videos

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites
No prerequisites are necessary to follow this course

Responsable
IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

WHY ARTIFICIAL LIFT? — 0.5 day

Main parameters relative to reservoir and well performance curve: inflow and outflow.
Need for artificial lift.

SUCKER ROD PUMPING — 1.5 days

Principle, field of application, crucial parameters.

Main specific equipment: surface Pumping Units (PU), downhole pumps, rodstring.
Operating procedures and troubleshooting.
Example of rodstring load calculation.

ELECTRICAL SUBMERSIBLE CENTRIFUGAL PUMPING (ESP) 2.25 days

Principle, field of application.
Main specific pieces of equipment: pump, seal section/protector, electric motor selection, Variable Speed Drive (VSD) interaction.
Operating procedures and troubleshooting (including PROSPER™ methodology).
Example of design:

- Base case: oil “without problems”.
- Specific cases: gassy oil well, ESP with VSD.

OTHER METHODS & PROCESS SELECTION 0.5 day

Overview of other methods (hydraulic pumps, jet pumps, Progressive Cavity Pumps [PCP]): principle, fields of operation.
Artificial lift methods comparison, benefits and limitations.

KNOWLEDGE ASSESSMENT 0.25 day

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.
Please contact our disabled persons referent to check the accessibility of this training program : referent.handicap@ifptraining.com