

OIL & GAS PRODUCTION TECHNOLOGY

Continuous Gas Lift Application

ABOUT THE COURSE

The course is structured to enable full understanding of the continuous gas lift principles and process. Starting with gas lift components (downhole and surface) through total system analysis of single well and network, course ends with design methods, stability analysis and troubleshooting diagnosis. The participants will be introduced with the latest advances in gas lift technology. Using the software will contribute to full understanding of the mostly frequent used optimization and design procedures and methods.

Strong emphasis is given on the appropriate balance between the rigorous modeling of various phenomena and the approximations that are justified considering many uncertainties associated with the oil production in general and gas lift operations in particular.

DESIGNED FOR

Engineers responsible for the design and optimization; production operation engineers involved with daily monitoring and trouble analysis; field supervisors and others who install, or operate gas lift systems.

YOU WILL LEARN

- Continuous gas lift principle and process
- Gas lift components (down hole and surface equipment)
- System analysis of continuous gas lift
- Design methods
- Regulation, measurement, troubleshooting and stability

COURSE OUTLINE

- Generalities
- Basics of the two phase flow
- Inflow performance analysis
- Gas laws as applied to gas lift
- Gas lift valve mechanics
- Continuous flow gas lift unloading sequence
- Continuous flow gas lift design (IPO, PPO & fixed mandrels design)
- Mandrel spacing and gas lift valve sizing (coherent approach possible only using the software)
- Optimal lift gas allocation to a group of wells
- Surveillance, diagnostics and troubleshooting

Each section includes exercises tailored for better understanding of various concepts.