

Training - Coiled Tubing and Nitrogen Operations in Completion and Workover



CTA-EN-P



Face-to-face only



5 days

This course provides a comprehensive, practical knowledge of coiled tubing equipment and operations on a producing well

Level

Skilled

Public

Engineers, supervisors, technicians from operating or service companies, involved in completion, workover and stimulation

Objectives

Attendees will be able to implement the following skills:

- understand the main coiled tubing unit equipment, pipe characteristics & behavior
- define the need to use nitrogen unit, its applications & characteristics
- learn about coiled tubing applications in completion and workover
- asses the corresponding equipment for each application
- design coiled tubing programs (wellbore treatment, logging, cementing, lifting and drilling)

Pedagogical & technical resources

Exercises - Animations

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

Responsible

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

BASIC DATA

0.25 day

Importance of nitrogen in stimulation and workover.
Importance of coiled tubing in completion and workover.

NITROGEN - NITRIFIED ACID - FOAMED ACID

1 day

Nitrogen (properties, basic formula for design).

Specifications for nitrogen storage and pumping equipment.

Two-phase fluids and foams (properties, chart and tables for design, difference between foam and two phase fluids), diverting effect of foamed fluid.

Stimulation methodology, flow back procedure.

COILED TUBING EQUIPMENT (TECHNOLOGY, DIMENSION, WEIGHT)

0.75 day

Main components: reel, injector, BOP and related equipment.

Auxiliary equipment: crane, pumping equipment, etc.

Downhole tools: connectors, safety equipment, circulating tools, downhole motor, fishing tools, inflatable packers, etc.

Guide for safe equipment rig-up.

PIPE CHARACTERISTICS & BEHAVIOR

0.5 day

Geometric and mechanical properties: geometry, metallurgy, performance, characteristic curve.

Tubing behavior (at surface, in hole): fatigue, buckling, tension and pressure limits (tubing force analysis, model for operation design).

Measuring and recording of operating parameters.

COILED TUBING APPLICATIONS

2 days

Kick off with nitrogen, underbalance perforating.

Well clean out (fill removal, wax and hydrate removal).

Sand control.

Matrix treatment: acid, solvent.

Other applications: CT assisted DST, conveyed tool operations in high deviated well, use as producing, gas lift or chemical injection string, fishing, underreaming, drilling.

Statistics, economy, areas for future development.

CEMENTING OPERATIONS WITH NITROGEN OR COILED TUBING

0.5 day

Foamed cement: definition, use (primary cementing, squeeze).

Cementing through coiled tubing: cement plug, squeeze (squeeze slurry characteristics, job design, key-points).

Sessions

Pau - From 05/18/2026 to 05/22/2026

4320 €/HT

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