

## Coiled Tubing and Its Applications

### Course Price

£3050

### Course Description

This five-day (5) training course covers conventional CT workover and completion application including CT drilling technology and coiled-tubing drilling hydraulics. It presents coiled tubing (CT) as a tool for workover, drilling, and completion services. It provides an overview of the properties of CT (mechanical performance of CT, including working limits, buckling, and fatigue), its manufacture, the surface equipment utilized for deployment, and subsurface tools for CT applications.

### Coiled Tubing Operations

Coiled tubing is chosen over conventional straight tubing because conventional tubing has to be screwed together. Additionally, coiled tubing does not require a workover rig. Because coiled tubing is inserted into the well while production is ongoing, it is also a cost-effective choice and can be used on high-pressure wells.

There are a number of well intervention operations that can be achieved via coiled tubing. These include cleanout and perforating the wellbore, as well as retrieving and replacing damaged equipment. Additionally, coil tubing drilling is now implemented in niche-areas and in particular in association with underbalanced drilling.

Advances in coiled tubing allow for real-time downhole measurements that can be used in logging operations and wellbore treatments. Hydraulic and acid fracturing, can also be performed using coiled tubing. Furthermore, sand control and cementing operations can also be performed via coiled tubing.

### Course Objectives

### Who Should Attend

Engineers and technicians that need to learn the fundamentals of Coiled Tubing Operations. Targets those interested in applying coiled tubing (CT) technology for workover services, drilling, completions, and production operations. This is an introductory CT course and is appropriate for individuals that are new to the CT industry or anyone that would like to expand their CT knowledge.

### Course Content

## **Introduction**

- Welcome
- What is Coiled Tubing Pipe, manufacturing, history and applications
- Applicable Coiled Tubing Services
- Surface equipment and major components for Coiled Tubing
- Well Control issues, BOP and integration with CT
- CT Pipe, properties, mechanical behaviour, issues
- Monitoring integrity of CT

## **Pipe Characteristics and Applications-1**

- CT Fatigue
- Buckling and Lock-up
- Well Control
- Matrix Stimulation with Coil Tubing
- Cementing with Coiled Tubing

## **Applications-2**

- Logging and perforating with Coiled tubing
- Fishing with Coiled Tubing
- Milling with Coiled Tubing
- Wellbore cleanout with Coil Tubing
- Hydraulic Fracturing with Coiled Tubing

## **Coil Tubing Drilling**

- Coiled Tubing Drilling applications
- Coiled Tubing Drilling Hydraulics
- Underbalanced Drilling
- Issues with Coil Tubing Drilling, rotation / non-rotation

## **Nitrogen Applications**

- Well unloading
- Fluid displacement and pipe cleanout
- Nitrogen calculations
- Safety and Operational Standards
- End of Course Quiz
- Closing

## **CPD Unit**

## **Continuing Professional Development**



**35 HOURS CPD**