

Single-Gear Drawworks

Overview

Theoretical product training for single-gear drawworks type GH9000 including

- Classroom training
- TTL training (Technical Training Laboratory)

This is an open-class training. The training content is not project specific or customized.

Course description and learning objectives

In this training package you will learn

- The basic knowledge about the functionality of the different main components and their hydraulic systems.
- The features, functionality and redundancy of the different control systems DICS, DCS, ZPS, DBS and ADS.
- How to execute routine and safety relevant maintenance work considering maintenance procedures, WKI documents and HSSE mindset.
- How all components mechanically/hydraulically interact and how the failsafe philosophy is realized.
- How to operate the single-gear drawworks using IOC touch panel and joystick in different speed settings, adjusting working points and tool compensation as well as executing ZPS calibration run and using autodriller features.
- To understand the complex control processes, their failsafe philosophy and how the control systems communicate and interact to each other.
- How to execute maintenance work, based on relevant documents, safe and correctly.

Training content

General arrangements, technical data and performance diagrams of drive and braking system

- Design and functionality of main components
- Hydraulic system
- Operation of operator chair touchpanel, joystick and DrillView (based on HMM HMI)
- Operation of DCS HMI
- Operation of Emergency lowering device
- Emergency stop handling
- Design and functionality of
 - DICS – Drawworks Interface and Control System
 - DCS – Drawworks Control System
 - ZPS – Zone Positioning System
 - DBS – Disc Brake System
 - ADS – Auto Driller System
 - WPS – Wireline Protection System

Duration

3 days

Course capacity

Min. 5 participants
Max. 12 participants

Target group

Maintenance personnel

Language

Training execution and digital training material will be provided in English language.

Prerequisites

- Basic knowledge about drilling technology
- General technical and physical understanding
- Basic hydraulic knowledge is recommended
- Electrical knowledge and ability to read electrical schemes and bus topology drawings is recommended

