

WOODFIELD

ENGINEERED FOR A LIFETIME

WOODFIELD SYSTEMS LIMITED

OPERATOR & MAINTENANCE PERSONNEL TRAINING PROGRAMME

LEVEL 1

WSL level 1 training programme is intended for operations personnel with extensive experience of Loading Arms. The training will be performed by a WSL Commissioning Engineer.

Training shall take place over one practical session (based on group sizes up to 10 persons). The training package is based on procedures detailed in WSL Operation and Maintenance Manual. Training is not intended to replace the operation manual. Attendees completing the course shall receive a Certificate of Attendance.

OBJECTIVES

Each trainee shall: -

- Be able to safely connect and disconnect the loading arm to a ship and arm the ERS.
- Understand the alarm signals and required actions.
- Be conversant with the events that take place before and during an ERS event.
- Understand the sequence of events necessary to reassemble the emergency release collar and re-set the electro-hydraulic control system.
- Understand the basic maintenance requirements of the WSL loading arm.

TRAINING SESSION PROGRAMME

SESSION PRACTICAL 1

Review of the Woodfield Loading Arm, its component parts – name and functions
Electro-hydraulic control system components

Each attendee shall have the opportunity to start-up and un-stowing the loading arm

- Power on – hydraulics in ‘Control’
- Selection of arm
- Outer arm hydraulic / mechanical stow lock valve
- Main stow lock
- Slew lock
- Manoeuvring the loading arm
- Selecting operation mode – panel or pendant
- Demonstrate overreach alarms and full reach of loading arm
- Connecting to a ship’s flange
- Preparation of ships flange
- Preparation of loading arm flange
- Connection – hydraulics in ‘Freewheel’
- Arming the ERS
- Final preparations for transfer of product
- Principle for draining the loading arm, disconnection and re-stowing loading arm
- Draining the outer arm
- Draining the inner arm and riser
- Disarm the ERS
- Disconnection sequence
- Stowing the loading arm
- System shut-down
- Emergency release system (ERS)
- Component parts
- Sequence of operation
- Perform a routing simulated release test
- Re-setting the ERS
- Perform a manual (hydraulic valve) simulated release test
- Re-setting the ERS
- Maintenance
- Lubrication
- Hydraulic system
- Planned maintenance suggestions
- Testing of loading arm, emergency release system and control system
- Exercising / regular arm manoeuvring
- Monthly check of insulation joint

Attendees will be encouraged to operate the arm / controls and perform regular stowage and simulated ERS functions.