



ROV Operations and Subsea IMR Course: Work-Class Vehicles, CP Surveys and Campaign Planning



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Introduction:

ROV operations and subsea IMR, covering work-class vehicles, CP surveys and campaign planning, is a 1-week course for asset integrity and marine operations units that ends with a Subsea IMR Campaign Plan for a case organisation. Operators lose vessel days, inspection coverage and integrity evidence when ROV spreads, tooling and survey scopes are specified loosely and anomaly data arrives late or unusable. Nominees already manage subsea inspection scopes or ROV service contracts, and learning is by case study on survey reports, CP data sets, vessel schedules and anomaly registers. CoreConcept Training Center delivers this ROV operations and subsea IMR course.

Course Objectives:

- Select the ROV class, AUV or resident drone suited to each inspection and intervention task on pipelines and subsea structures
- Specify tether management, launch and recovery arrangements and tooling for an ROV spread against IMCA ROV guidance and ISO 13628 interface requirements
- Define inspection scopes using general visual, close visual, CP potential, UT thickness and flooded member detection methods
- Interpret CP survey and anomaly data to rank integrity findings and set repair priorities
- Plan intervention tasks, DP vessel spreads and campaign schedules that control weather downtime and vessel days
- Produce a Subsea IMR Campaign Plan that sets scopes, vehicles, vessel spread and reporting rules for a case organisation

Target Audience:

- Asset integrity units responsible for subsea pipeline and structure inspection programmes
 - Marine operations units responsible for vessel, ROV and survey spreads offshore
 - Subsea engineering units responsible for intervention and repair work packs
 - Contract management units responsible for ROV and IMR service agreements
 - Corrosion control units responsible for anode condition and cathodic protection survey data
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Course Outline:

Day 1: Subsea IMR Foundations, Vehicle Classes and Asset Baseline

- IMR Scope Definition Across Pipelines, Jackets and Subsea Structures
- ROV Class Comparison From Observation to Heavy Work-Class
- AUV and Subsea Resident Drone Roles in Inspection
- Integrity Threats Driving Inspection Frequency and Method Choice
- Subsea Asset Register and Inspection History Baseline Review

Day 2: ROV System Architecture, Tooling and Interface Standards

- Tether Management System Garage and Top-Hat Configurations
- Launch and Recovery Through the Splash Zone and Sea State Limits
- Manipulator Arms, Torque Tools and Tooling Skid Selection
- ISO 13628 ROV Interface Requirements for Subsea Equipment
- IMCA ROV Guidance for Personnel, Equipment and Audits

Day 3: Inspection Techniques and Survey Data Acquisition

- General Visual and Close Visual Inspection Coding Conventions
- Cathodic Protection Potential Survey With Ag/AgCl Reference Electrode
- Ultrasonic Wall Thickness and Flooded Member Detection on Jackets
- Pipeline Free Span, Burial and Exposure Survey Methods
- Survey Positioning, Video Overlay and Eventing Data Standards

Day 4: Intervention Planning, DP Vessel Spreads and Campaign Risk

- Repair Clamp Installation and Component Change-Out Task Planning
- DP Vessel Spread Selection, Deck Layout and Simultaneous Operations
- Sacrificial Anode Depletion Assessment and Retrofit Anode Sled Planning
- Campaign Schedule, Weather Downtime and Vessel Day Optimisation
- Anomaly Classification, Criticality Ranking and Reporting Turnaround Control

Day 5: Case Study Producing a Subsea IMR Campaign Plan

- Case Organisation Asset Register and Integrity Threat Review
 - Case Inspection Scope and ROV Class Selection Worksheet
 - Case CP and Anomaly Data Set Interpretation Session
 - Case DP Vessel Spread and Campaign Schedule Build
 - Subsea IMR Campaign Plan Completion and Peer Review
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Skills You Will Gain:

- ROV Class Selection
- ROV Tooling Specification
- Inspection Scope Definition
- CP Survey Interpretation
- Anomaly Criticality Ranking
- Intervention Task Planning
- DP Vessel Spread Planning
- Survey Data Quality Review

Why Attend This Course:

- Deliver a Subsea IMR Campaign Plan for a case organisation to the asset integrity manager and the marine operations lead for approval
- Decide which vehicle class, tooling and vessel spread each inspection or repair task warrants before services are tendered
- Avoid lost vessel days, incomplete inspection coverage and late anomaly reporting caused by loose scopes and unchecked contractor data
- Share inspection coding sheets, CP data checklists and campaign scheduling templates with integrity and marine colleagues

Conclusion:

Back at work, the participant gives the asset integrity manager and the marine operations lead a Subsea IMR Campaign Plan that sets inspection scopes, vehicle classes, tooling, vessel spread and anomaly reporting rules for the organisation's subsea assets. Contracts staff use it to tender ROV and vessel services, and integrity engineers use it to accept or reject survey deliverables. After the first campaign under the plan, the unit should compare achieved coverage, vessel days, weather downtime and anomaly closure against the plan and revise it.

Frequently Asked Questions FAQ:

What should participants know before the ROV operations and subsea IMR course?

Participants should already handle subsea inspection scopes, integrity data or ROV and vessel service contracts. No ROV pilot qualification is needed. An anonymised inspection report, CP survey data set or campaign schedule from their organisation helps during the case work.

How does ROV operations and subsea IMR differ from a commercial diving or subsea pipeline design course?

This course covers the remote vehicles, inspection methods and campaign planning used to keep installed subsea assets fit for service. Diving courses manage divers and their safety, and pipeline design courses size and install new lines rather than inspect and repair them.

Why do ROV operations and subsea IMR campaigns rely on cathodic protection surveys?

Cathodic protection surveys show whether sacrificial anodes still hold submerged steel at a protective potential. Readings against a reference electrode, with anode depletion estimates, tell integrity engineers where corrosion risk is rising and where retrofit anodes are needed.

What do participants take back from the ROV operations and subsea IMR course?

Participants take back a Subsea IMR Campaign Plan for a case organisation, with a vehicle class selection worksheet, an inspection scope, a CP data review, a vessel spread choice, a campaign schedule and anomaly reporting rules.
