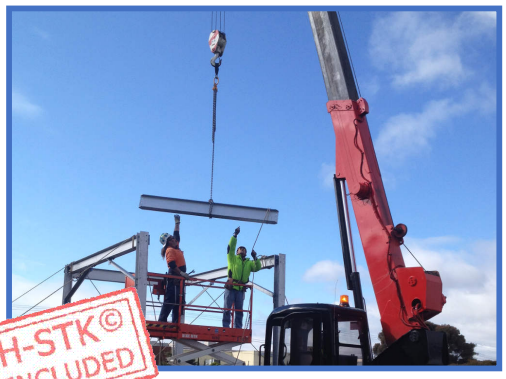
COURSE OVERVIEW OE0073
Offshore Rig Move Management: Considerations & Procedures

Course Title
Offshore Rig Move Management: Considerations & Procedures



Course Date/Venue
Session 1: April 07-11, 2025/Fujairah Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE
Session 2: September 14-18, 2025/Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE

Course Reference
OE0073

Course Duration/Credits
Five days/3.0 CEUs/30 PDHs

Course Description


This hands-on, highly-interactive course includes real-life case studies where participants will be engaged in a series of interactive small groups and class workshops.

Rigs are extremely expensive structures which require a great deal of inspection and maintenance if they are to remain in a safe condition. These structures are susceptible to corrosion and damage caused by dropped objects, and vibrating equipment. The pounding of wind on these rigs causes high alternating stresses which can initiate failures in structural members and it is therefore essential to maintain a regular programme of inspection and monitoring in order to ensure the safety and integrity of them.

Preventing the occurrence of accidents in drilling, construction and well servicing operations is a constant and major concern for any company or contractor acting in the upstream Petroleum industry. Analysis of accidents often identifies a number of contributing factors and/or anomalies, among which the equipment related items play a significant role. This course concentrates on the rig inspection process as a consistent method of detecting equipment related anomalies before operations commence.

These inspections enable the necessary corrections to be made in due time, thereby limiting the occurrence of accidents once the rig is in operation. When in-depth and systematic rig inspections are carried out, it is that the percentage of accidents where equipment failure is the major cause remains very low. However, equipment condition factors contributing to the accidents still remain present in large number of cases.

The purpose of any rig inspection is to ensure that the rig being used is capable of carrying out the operations safely, efficiently and cost-effectively. Most operators have in-house checklists for rig inspection. However, as with most lists, they tend to have grown with time, to the point where in some cases they are unwieldy and to execute the required rig audit in any depth could take longer than drilling the proposed well.

This course is designed to provide participants with a good overview of the rig inspection methodologies based on API, IMO, MMS and IMCA Standards and regulations. It covers inspection of documentation, personnel, repair and maintenance programmes, inventory carried and physical checklist for acceptance.

Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Apply and gain more knowledge in rig inspection and be able to identify the different examples of drilling equipments in offshore and onshore drilling rigs inspection
- Carryout basic rig inspection independently at every rig move
- Identify the critical elements in relation to rig performance and optimization, personnel safety, planned inspection and maintenance to reduce rig down
- Discuss the components of oil drilling rig and recognize the field inspection checklist
- Conduct rig inspection and drilled shaft foundation construction inspection
- Explain the inspection guidelines to well control equipment
- Employ generator in-situ inspections and analyze the critical part of generator maintenance cost reduction
- Recognize power control rooms and electrical system general
- Carryout the inspection guidelines to offshore cranes, hoist and stabbing boards
- Inspect and maintain jacking systems and identify the competence level
- Recognize the information requirements, specific components and further improvements
- Inspect and maintain skidding system and apply main sheave positional system assembly
- Maintain and inspect gas turbines and firefighting equipment

Exclusive Smart Training Kit - H-STK®

*Participants of this course will receive the exclusive "Haward Smart Training Kit" (**H-STK®**). The **H-STK®** consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.*

Who Should Attend

This course provides an overview of all significant aspects and considerations of offshore rig inspection for rig managers, engineers, superintendents, supervisors, CSR, drilling superintendents, drilling engineers, senior drilling engineers, field engineers, maintenance engineers, rig engineers, rig inspectors and other rig personnel from drilling and well engineering department.

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

30% Lectures
20% Practical Workshops & Work Presentations
30% Hands-on Practical Exercises & Case Studies
20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Course Fee

US$ 8,000 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

Course Certificate(s)

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -

- British Accreditation Council (BAC)

  Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

- The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units** (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:

Captain Sergey Kole, is an **International Expert** in **Port Operations & Logistics Management** with over **25 years** of **onshore** and **offshore** experience within the **Oil & Gas**, **Petroleum** and **Refinery** industry. His expertise widely covers in the areas of **Anatomy of Shipping**, **Logistics & Transportation Planning** Methods, **Forecasting Logistics** Demands, Visual Network Model, **Logistics Operations**, **Tanker Vetting & Inspection**, **Marine Vetting & Audit Criteria Manual** for **Tank Ships**, **Marine & Ship Vetting**, **Vetting Process & Marine Safety Criteria**, **Tanker Vetting** for **Terminals**, **Ship Vetting**, **Marine Terminal** Operations & Management, **Marine Hazards** Prevention & Control, **Marine Communication** Systems, **Marine Safety**, **Ship** Management, **Oil Terminal** Planning, **Vessels** Operations, **Terminal** Management & Support Operations, **Oil Spill Contingency & Emergency Response Plan**, **Qualitative & Quantitative Risk** Assessments, **Terminal** Planning, **Oil Tanker Storage** Planning, **Cargo Transfer** Handling, Loading & Discharging, **Ballasting**, **Tank** Cleaning, **Crude Oil Washing**, **Ship** Handling, **Radar** Navigation, **Navigational** Aids, **Meteorological** Data Review, **Sea & Weather** Condition Monitoring, **ERT Vessel** Coordination and **Transport & Distribution Carrier**. Further, he is well-versed in **Sea-going** Personnel Human Resource Management, **Survival Craft & Rescue Boats**, Dynamic Positioning, Anti-Piracy Preparedness & Response, **Shipping** Maintenance System, **Oil & Chemical Tanker**, **Liquefied Gas Tanker**, **Inert Gas** System, **Crude Oil** Tanker & Gas Carrier, Offshore Logistics & Supply Management, **Marine Fleet** Management & Operations, **International Maritime Conventions & Codes**, **Marine Radar**, **Port Traffic Control** Systems & Instrumentation, **H^2S** Hazard Awareness, **Firefighting**, Medical Care Onboard, Carriage of Dangerous & Hazardous Substances and **Ballast Water & Sediment** Management.

During his career life, Captain Sergey has gained his technical and marine expertise through various challenging key positions such as being the **Captain**, **Operations Director**, **Project Manager**, **Port Supervisor**, **Master** of General Cargo Ship, **Master** of Container Ship, **Chief Officer**, **Marine Operations Specialist**, **Marine Coordinator**, **On-call Duty Officer**, **Crewing Consultant**, **2nd Officer**, **Ship Chandler** and **Senior Instructor/Trainer** for several international companies such as **ZADCO**, **AMEC Foster Wheeler**, Fircroft Engineering Services, Ltd., Rusalina Yacht Company, Van Oord Offshore, Exxon Neftegaz Ltd (ENL), Jr Shipping, Carisbrooke Shipping, Unicorn Petrol ve Kimya, Q Shipping BV, m/v Tradeport, Miedema Shipping CV, Rah Management BV, Petrobulk Maritime Inc., Empross Lines Ship Management, Melcard Ltd., Aquarian Shell Marine Inc., Mercy Baaba and Square Ltd.

Captain Sergey has a **Bachelor's** degree in **Navigation** in **Nautical Studies** from the **Kiev State Academy** of **Water Transport**, **Ukraine** and holds a **Master Mariner** (Unlimited) Certificates of Equivalent Competency from the MCA, UK and NSI, Netherlands. Further, he is a **Certified Instructor/Trainer**, a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management** (**ILM**) and has delivered various trainings, courses, seminars, workshops and conferences internationally.

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***Introduction*** *Major Drilling Rig Equipment • Contents • Petroleum Drilling Industry • Water Well Drilling • Mining Drilling Industry • History • Drilling Rig Classification • Drill Types • Auger Drilling • Percussion Rotary Air Blast Drilling (RAB) • Air Core Drilling • Cable Tool Drilling • Reverse Circulation (RC) Drilling • Diamond Core Drilling • Diamond Core Drill Bits • Direct Push Rigs • Hydraulic Rotary Drilling • Sonic (Vibratory) Drilling • Automated Drill Rig • Limits of the Technology • Rig Equipment • Understand the Basics of EX Equipment Installed in Hazardous Areas*
0930 - 0945	*Break*
0945 – 1030	***List of Components of Oil Drilling Rigs*** *Offshore Drilling • List of Items • Simple Diagram of a Drilling Rig and Its Basic Operation • Explanation • List the Relevant Standards (such as API) and their Implications for Drilling Equipment*
1030 – 1130	***Field Inspection Checklist***
1130 - 1230	***Rig Inspection*** *Definitions • Brief Introduction About Basic (Visual) Rig Inspection • Methods of Inspection • Frequency of Inspection • Result of Inspection / Corrective Action • Acceptance Criteria • Performance Load Test • Proof Load Test • Describe the Main Inspection Criteria for Major Equipment • Identify the Major Items that have An Impact on the Safety and Operation of a Rig • Recognize the Indicators of the Overall Condition of a Drilling Rig • Evaluate Basic Maintenance and Inspection Procedures on the Rig to Identify Compliance with Good Working Practices and Industry Standards • Corrosion • Rejected Equipment • Equipment Identification • Daily/Weekly inspection of Equipment/Accessories of Mast & Substructure • Inspection of Electrical Accessories of Mast • Check List Formats • References*
1230 – 1245	*Break*
1245 – 1330	***Drilled Shaft Foundation Construction Inspection*** *Introduction to Drilled Shaft Inspection • Role and Responsibilities of the Inspector • Introduction to Drilled Shafts • Drilled Shaft Design – In Soil • Drilled Shaft Design – In Rock • Plans, Specifications and Reports • Equipment and Safety • Applicable Specifications and Forms • Shaft Excavation Tools and Methods*

1330 - 1420	***Drilled Shaft Foundation Construction Inspection (cont'd)*** *Truck Mounted Drill Rig • Crawler Body Mounted Drill Rig • Crane Mounted Drill Rigs • Drilling Tools • Earth Drilling Tools • Earth Drilling Tools – Earth Auger • Rock Drilling Tools • Clean Up Tools • Shaft Excavation Methods • Shaft Excavation Inspection • Obstructions and Differing Site Conditions • Shaft Sizes and Tolerances*
1420 - 1430	***Recap***
1430	*Lunch & End of Day One*

Day 2

0730 – 0830	***Drilled Shaft Foundation Construction Inspection (cont'd)*** *Squeezing. Necking and Cave-Ins • Rock Sockets • Shaft Acceptance • Friction Shafts • End Bearing Shafts in Soil • Rock Socket Shafts and Top of Rock Shafts • Bottom Flatness and Cleanliness • Rebar and Concrete Inspection and Installation • Rebar • Concrete • Concrete Mix Design Slump and Slump Retention*
0830 – 0930	***Drilled Shaft Foundation Construction Inspection (cont'd)*** *Concrete Placement • Removal of Temporary Casing • Inspector's Checklist and Documentation • NOT and Load Testing • Non-Destructive Testing • Impulse Echo or Impulse Response • Cross-Hole Sonic Logging • Thermal Integrity Profile • Non-Destructive Testing Limitations • Load Testing • Static Load Test • Lateral Load Test • Bi-Directional Load Test • High Strain Dynamic Load Testing • Role of the Inspector • Trouble Shooting*
0930 - 0945	*Break*
0945 – 1030	***Inspection Guidelines to Well Control Equipment*** *Procedures for Inspection, Maintenance, Repair, and Remanufacture of Drilling Equipment • Operating precautions and Inspection Requirements Before or After Use • Understand the Basics of Well Control Equipment Operation*
1030 – 1130	***Generator In-Situ Inspections A Critical Part of Generator Maintenance Cost Reduction*** *Introduction • In-Situ Inspection – A Critical Part of Generator Maintenance Cost Reduction • Guidelines for Choosing In-Situ Inspection Versus Pulling the Rotor • In-Situ Inspection Technologies • Miniature Air Gap Inspection Crawler (MAGIC) • Remote Capacitance Probe • Retaining Ring NDE Scanner • Other Testing • MAGIC Acceptance and Experience Industry Acceptance • System Design • Traditional vs. In-Situ Cost Analysis • Reducing Outage Duration • Reducing Disassembly Requirements • Minimize Consequential Damage • GE's Position on In-Situ Inspection • Conclusions*
1130 - 1230	***Power Control Rooms*** *Automation Systems • Integrated Control System • Control Consoles • Central Control Room • Emergency Shutdown System (ESD) • Ballast System • Bilge System • Drilling and Production Control Systems • Materials • Fire and Gas (F&G) Detection • Noise and Vibration • Indoor Climate • Fresh Air Requirement • Ventilation/Air-Conditioning Systems for Control Rooms Etc. • Public Address and Alarm System (PA) • Alert Systems • Closed Circuit Television System (CCTV) • Ship Security Alert System • Control Cabins • Driller's Cabin/Control Room • Driller's Intercom System (Talk Back System) • Escape Routes*
1230 - 1245	*Break*

1245 – 1420	***Electrical Systems General*** *Single Line Diagram • Electrical Power Supply • Generators () • Power Transformers () • Converters and Rectifiers • Topsides Facilities Electrical Supply • Electrical Distribution Common Systems • Main Switchboards • Emergency Switchboard • 400/230V Distribution Boards • Earthing & Bonding • Topsides Facilities Electrical Distribution • Electrical Cable Installation • Electrical Consumers • Lighting • Electric Motors • Electrical System – Drilling Facilities*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Two*

Day 3

0730 – 0930	***Inspection Guidelines to Offshore Cranes, Hoist and Stabbing Boards*** *List of Abbreviations • Objectives of this Guide • Scope and Extent of Guidance • Guidance on the Contents of Crane Safety Cases • Incomplete Records • Safety Categorisation of Cranes • Crane Reviews • Substantiation of Crane Categorisation • Substantiation Required • Scope of Crane Reviews • Load Conditions • Maintenance and Operating History • Control Procedures • Structural and Mechanical Integrity • Criteria for the Review • Structural • Ageing and Degradation • Review of Dropped Load Incidents • Operating Rules • QRA in the Life of an Installation • Risk Assessment • Interfaces with Other Plant/Systems • Comparison Against Modern Standards • Oil and Gas Production Regimes • Normally Manned Installation • Normally Unmanned Installation – Remote Controlled • Applicable Aspects of the Production Regimes • Design, Manufacture & Testing Standards • Crane Duties and Performance*
0930 – 0945	*Break*
0945 – 1030	***Inspection Guidelines to Offshore Cranes, Hoist and Stabbing Boards (cont'd)*** *Design Codes • Relevant Legislation • Design Parameters • Testing and Inspections • Testing and Inspection Procedures • Ageing and Degradation • Condition Monitoring • Frequency Domain Information • Lube Oil Analysis • Thermography • Corrosion Detection • Applicable Aspects of Crane Ageing and Degradation • Controls and Procedures • Applicable Aspects of Management Controls • Elected Safety Representatives Network – Objectives Are • Industry Safety Performance Work Group • Human Factors • Checklist Audit of Pedestal Crane Safety Case for Operation Beyond its Design Life • Management Procedures and Controls • Operating and Maintenance History • Structural and Mechanical Integrity • Protection Against Dropped Loads*
1030 – 1130	***Inspection and Maintenance of Jacking Systems*** *Introduction • Background • Objective • Scope • Application • Structure • References • Definitions and abbreviations • General Definitions • Abbreviations*
1130 – 1230	***Competence Levels*** *General • Competence Level Descriptions • Hand-over between different roles*
1230 – 1245	*Break*

1245 – 13330	***Inspection*** *Introduction • Structure • General • Rig Moves • Periodical Inspections • Detailed Inspections • General Approach • Wear vs. Fatigue Life • Focus Areas • Extraordinary Inspections*
1330 - 1420	***Maintenance*** *Introduction • General Considerations • Replacement of Jacking System Elements • Spares • Obsolescence • Baseline*
1420 – 12430	***Recap***
1430	*Lunch & End of Day Three*

Day 4

0730 – 0830	***Information Requirements*** *Introduction • Design Information • Life Time Expectation • Material and Welding Specifications • Replacement Criteria • Life Cycle Status • User/Maintenance Manuel • User and Maintenance Records • Calculation of Jacking System Fatigue Life*
0830 – 0930	***Specific Components*** *Introduction • Guides, Jack House and Racks • Shock Pads • Climbing Pinion Including Bearings and Other Non-Enclosed Gearing • Braking System • Power/Motor System • Control Systems • Software • Ageing and Availability*
0930 – 0945	*Break*
0945 – 1030	***Further Improvements*** *Introduction • RAM Approach • Case Study • Appendix a Training, Competence and Knowledge Guidance • During-Jacking Inspections and Activities • Post-Jacking Inspections and Activities • RAM Case Study • System Overview • Input Data • Assumptions • Results • Recommendations*
1030 – 1130	***Inspection and Maintenance of Skidding Systems*** *IMCA Guidelines • Provision and Use of Work Equipment Regulations (PUWER) • Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) • Occupational Safety and Health Administration (OSHA) • Offshore Industry Forum/Standards • Introduction to a Complex Offshore System– Module Handling System (MHS) – Example in Vessel Fugro Symphony*
1130 – 1230	***General Description*** *Each of these Subsystem are Described and Evaluated Later in the Report*
1230 – 1245	*Break*
1245 – 1330	***Main Sheave Positional System Assembly*** *Description and Evaluation • General Recommendations for Modification of the Sheave Positional System • Guide Wire Sheave Positional System Assembly • Sheaves for Guide Wire Winches • Recommended Maintenance Procedure*
1330 – 1420	***Wire Ropes*** *Tools Specified by IMCA for the Management for Wire Ropes • Recommendations*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Four*

Day 5

0730 – 0830	***Main Winch*** *Recommendations Maintenance Schedule • Mid level Platform • Recommendations*
0830 – 0930	***Skidding System*** *Push-Pull Unit • Pallets • Moonpool Door System • HPU System • Preventive Maintenance • Scheduled Maintenance • Structural and General Layout/Equipments of System • Human Resources - Attributes, Training and Assessment*
0930 – 0945	*Break*
0945 – 1030	***Inspection of Pumps and Valves*** *Inspection Objective • Inspection Requirements • Inspection Guidance Inspection Resource Estimate*
1030 – 1130	***Maintenance and Inspection of Gas Turbines and Equipment*** *Overview • Inspection & Repair • Refurbishment of Gas Turbine Components • Evaluation of Damage • Disassembly • Dimensional Checking • Non-Destructive Testing (NDT) • Metallurgical Examination • Defining of Workscope • Processes • Nozzle and Vanes • Buckets and Blades • Quality Records • Maintenance Guidance • Water (or Steam) Injection • Cyclic Effects • Rotor • Combustion System • Off Frequency Operation • Air Quality • Inlet Fogging • Maintenance Inspections • Standby Inspections • Running Inspections • Disassembly Inspections • Combustion Inspection • Hot-Gas-Path Inspection • Major Inspection • Turbine Bore Inspections • Summary by System and Component*
1130 – 1230	***Inspection of Firefighting Equipment*** *Portable Fire Extinguishers • Service and Inspection • Spare Charges • Hydraulic Pressure Test and Test Pressure • Instructions and Record Keeping • Fixed High Pressure CO2 Fire-Extinguishing Systems • Maintenance and Inspection • Hydrostatic Pressure Testing • Fixed Low Pressure CO2 Fire-Extinguishing Systems • Fixed Dry Powder Fire-Extinguishing Systems • Sprinkler, Fixed Pressure Water-Spray and Water-Mist Systems*
1230 – 1245	*Break*
1245 - 1345	***Inspection of Firefighting Equipment (cont'd)*** *Fixed Foam Fire-Extinguishing Systems • Cylinders for Self-Contained Breathing Apparatus (SCBA) • Hydrostatic Pressure Testing and Test Pressure • Cylinders for Emergency Escape Breathing Device (EEBD) • Cylinders for Survival Craft Self-Contained Air Support System • Medical Oxygen Cylinders*
1345 – 1400	***Course Conclusion***
1400 – 1415	***POST-TEST***
1415 - 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Practical Sessions

This practical and highly-interactive course includes real-life case studies and exercises:-

Course Coordinator

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