

## **COURSE: WIRE ROPE INSPECTION**

### **SCOPE AND APPLICABILITY:**

This course is designed to give the skills and knowledge to perform inspections on wire rope in accordance with statutory requirements. Course content is in line with IMCA guidance documents and syllabi for wire rope related training courses. This course also meets Norwegian and Canadian training standards as per NORSOK and Canada Occupational Health and Safety Regulations.

### **REGULATIONS & STANDARDS**

- API-U American Petroleum Institute
- International Marine Contractors Association (IMCA) IMCA SEL 022 Rev. Guidance on Wire Rope Integrity for Vessels in the Offshore Industry
- NORSOK Standard R-002 Lifting Equipment 2nd Ed. 2008
- International Organization for Standardization: ISO 4309 Cranes-Wire Ropes Code of Practice for Examination and Discard
- Occupational Safe and Health Administration: OSHA 1926.1413 Wire Rope Inspection
- European Nationalized Standard EN 12385 Steel Wire Ropes Safety
- American Petroleum Institute API RP 2D Recommended Practice for Operation and Maintenance of Offshore Cranes and API RP 9B: 2005 Recommended Practice for Application, Care and Use of Wire Rope for Oil Field Service
- American Society of Mechanical Engineers ASME B30.9-2010 Slings
- Canada Occupational Health and Safety Regulations SOR/86-304 15.25-26

### **COURSE CONTENT:**

1. Components of wire rope;
2. Type of construction of wire rope;
3. Safety factors;
4. Inspection criteria;
5. Periodic inspection;
6. Frequent inspections;
7. Disposal criteria;
8. Damages caused by temperature, chemicals, bad practices, corrosion, etc.;
9. Reduction of diameter;
10. Internal examination;
11. Greasing of wire rope;
12. Record keeping.

### **COURSE DESIGN:**

Theoretical – 4 hours

Practical – 4 hours

**TOTAL:** 8 hours

### **PREREQUISITE(S):**

None.

### **MINIMUM/MAXIMUM NUMBER OF DELEGATES**

This course requires a minimum of 1, and a maximum number of 12 trainees.

To offshore trainings, the course number of attendees will comply with the vessels/rig necessity.

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**MAIN SAFETY ISSUES:**

- Attention with safety details involving the cables;
- Integrity of cables;
- Selection criteria of disposal of damaged cables.

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**REQUIRED EQUIPMENT:**

- Different types of cables;
- Sample of damaged materials.

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**PROCEDURE FOR PRACTICAL EXERCISES:**

- With different cables, the employees are going to identify different types of damages and possible causes.

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**CERTIFICATION:**

Training certificate.

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**CERTIFICATE VALIDITY PERIOD:**

Recommendable: 4 years.