



# TUV / IICS 4.1 CERTIFIED OFFSHORE CRANE INSPECTOR & API RP 2D - OFFSHORE CRANE INSPECTOR CERTIFICATION PROGRAM

**COURSE DURATION: 7 DAYS**

## WHAT'S UNIQUE ABOUT THIS COURSE?

This program has three interrelated purposes:

- Firstly, to introduce students to the **safe operating and inspection procedures** of Offshore Class Cranes
- Secondly, to develop **practical crane inspection skills** with an actual crane,
- And finally, to assess each student's **abilities** through an evaluation process.

Instruction will include **lectures, discussions, videos, Power-Point presentations** and **practical lessons** by **using an actual crane**.

Participants can now pursue **TUV / IICS 4.1 Certified Offshore Crane Inspector** certification, the international certification body.



Log in to [www.international-inspector-certification.com](http://www.international-inspector-certification.com) for more information about IICS.

**REACH US Today for Greater Safety, Quality, Reliability, Productivity, Profitability**  
HRD Approved Training Provider (since Year 2002). Registered with Ministry of Finance



## COURSE OBJECTIVES

At the end of the course, delegates will:

- ✓ Become a "competent personnel" to inspect offshore cranes and lifting equipment.
- ✓ Be able to understand the relevant standards.
- ✓ Become confident in carrying out difficult tasks.

## COURSE OUTLINE

### DAY 1

- IICS/ TUV Nord final assessment and certification
  - \* Examination structure
  - \* How to prepare myself for the examination
- Introduction into Off-shore pedestal Cranes and other Lifting Equipment
- The Law, Rules and Regulations, applicable standards and codes
- "Competent Crane Personnel", as described in Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)
- "The Crane Inspector"
  - \* Responsibility
  - \* Training and qualification
- Equipment and tools needed by the crane inspector
- Safe working practices, OSHA
- API Spec 2C " Offshore Pedestal-mounted Cranes"
  - \* Crane part, Terms and Definitions
  - \* Documentation
  - \* Basic design and structural criteria, other requirements
  - \* Crane Ratings
  - \* Manufacturing requirements
  - \* Design validation
  - \* Duty cycles

### DAY 2

- API RP 2D "Operation and Maintenance of Offshore Cranes"
  - \* Additional Terms and Definitions
  - \* Basics of Crane operation
  - \* Inspection & Testing requirements
  - \* Maintenance, repair & replacement
  - \* Wire Ropes
  - \* Slings



### WHO SHOULD ATTEND?

- QA/QC and Maintenance Personnel from Oil & Gas Companies
- Government Agencies who inspect offshore cranes and overhead cranes
- Third Party Inspection (TPI) companies
- Companies who wish for competent staff

### COURSE DURATION

- 6 Days Training + 1 day Exam

### DAILY SCHEDULE

- 8:30am - 5:30pm

- API Specification 9A "Specification for Wire Rope"
  - \* Requirements towards to wire ropes
  - \* Inspection and Testing of wire ropes
- ASME B30.9 "Slings"
  - \* Definitions, Terminologies
  - \* Chain slings
  - \* Wire rope slings
  - \* Synthetic webbing slings

### DAY 3

- Site visit & practical (morning session)
- ASME B30.10 "Hooks"
  - \* Definitions, Terminologies
  - \* Hook types, components
  - \* Inspection
  - \* Removal & Repair
- Report preparation

### DAY 4

- Site visit & practical (morning session)
- Other related ASME standards
- ASME B30.4 "Portal and Pedestal Cranes"
- ASME B30.26 "Safety Standard for Cableways, Cranes, Derricks, Hoists, Hooks, Jacks, and Slings"
- Owner specific Requirements
- Other International Requirements
- Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)
- Approved Code of Practice and Guidance, L 113 (2014)
- Technical guidance on the safe use of lifting equipment offshore (2007)
- BS 7121 "Code of practice for the safe use of cranes"
  - Part 2-1 "Inspection, Maintenance and through examination"
- EN 13385 "Steel wire ropes. Safety"
- EN 13889 "Forged steel shackles for general lifting purposes"
- EN 13414 "Steel wire rope slings" - Part 1: "Slings for general lifting service"
- EN 1492 Part 1: "Specification for flat woven webbing slings, made of man-made fibres, for general purpose use"
- EN 1492 Part 2: "Specification for round slings, made of man-made fibres, for general purpose use"
- ISO 4309 "Cranes - Wire ropes - Care and maintenance, inspection and discard"



### ITEMS TO BRING

- Code Book (Hardcopy)
  - API RP 8B (8<sup>th</sup> Edition, 2014)
  - API Spec 2C (7<sup>th</sup> Edition, 2012)
  - API Spec 2D (7<sup>th</sup> Edition, 2014)
  - API Spec 9A (26<sup>th</sup> Edition, 2011)
  - ASME B30.4 - 2010
  - ASME B30.9 - 2010
  - ASME B30.10 - 2014
- Calculator
- PPE (Coverall, Safety Boots, Helmet, Safety Glasses, Gloves, Earplug)
- Lots of Questions
- A "CAN-DO" Attitude

**Stationeries such as pen and highlighter will be provided.**

## DAY 5

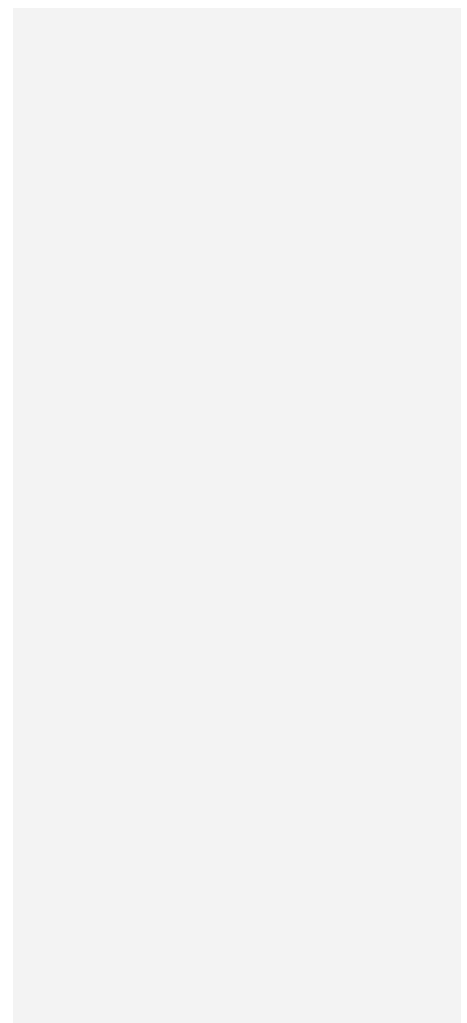
- Continue of day 4
- Case studies

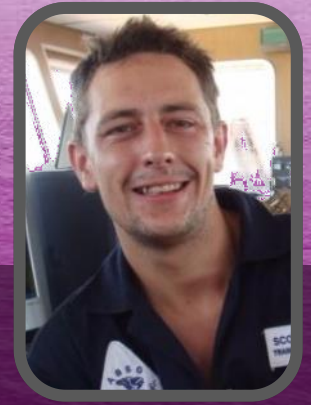
## DAY 6

- Inspection of other related lifting devices and equipment
- Non-destructive Testing in the crane inspection field (NDT)
- Question and answer session
- Revision

## DAY 7

- Examination
  - Session 1 (Morning)
  - Session 2 (Afternoon)





## TRAINER'S PROFILE

# SCOTT NICOL

**Scott Nicol** has approximately 24 years of experience in the field of Lifting Operations and Lifting Equipment both Onshore and Offshore and he has worked in 52 different countries covering most elements of the Lifting and Mechanical Handling industry.

An individual with a high regard for safe working practice for all employees and himself with a proven ability to work as part of an integrated and multicultural team, which has been recognized at both personal and team level.

The ability to maintain a high quality of lifting procedures with reference to lift planning, method statements and risk assessments complying with current legislation and regulations and also international regulations applicable to the country where he is based and working in.

His aim is to give his employer, client and colleagues his full potential on a daily basis to be part of a team that works and communicates to the highest degree of safety whilst executing company and clients safe systems of work during planned and unplanned activities.

## COUNTRIES WORKED IN:

- NSL: Georgia
- Global Sourysco: Egypt / Libya
- ABS Consulting: UAE / Oman / Qatar / Saudi Arabia / Bahrain / Kuwait / Lebanon / Singapore / Malaysia / Indonesia
- EMM: UKNorthSea / Norway / Denmark / Germany / Spain / Holland / Brazil / Congo / Nigeria / Gabon / Malta / Egypt
- Bureau Veritas: Ireland / Germany / Sweden / France / Denmark / Venezuela / South Korea / Dominican Republic / Barbados
- Lloyds Register: Sweden / UK
- Lloyds: Gabon / Cameroon / Uganda / Egypt / Denmark / Kenya / Ghana / Benin / Congo / Tunisia / Morocco / Nigeria / Liberia
- Fluor: USA / Trinidad / Tobago / Monaco

## TRAINER EXPERIENCE:

- 22 years in the Onshore / Offshore Heavy Lifting Industry.
- 14 years combined experience in Inspection / Integrity and Engineering / Verification.
- Gulf Marine Services Appointed Site Lifting Superintendent on Leighton Stealth Pipe Lay Barge Upgrade Project.
- Lloyds British Ghana Lifting Technical Authority - Training Manager.
- Bp-Gucpo Appointed Offshore Lifting Technical Authority.
- Lloyds British Lifting Technical Manager BP-Gupco Contract.
- ABS Consulting Senior Technical Representative Middle East Cranes & Lifting Dept.
- Technip UK Business Unit Appointed Rigging & Lifting Specialist.
- Various Onshore and Offshore Construction Projects responsible for the Planning, Risk Assessing and overall safe execution of all Lifting Operations carried out on site.
- Gained extensive knowledge in the Inspection, Examination and Testing of Offshore Cranes designed in accordance with ABS, Lloyds Register and DNV Classification
- Multi-disciplined NDT Inspector.
- Subsea Lifting Engineer for Structure Installation and Recovery.
- Decommissioning Lifting Engineer.
- Certification Management supporting Lifting Equipment inspection surveys for Onshore and Offshore operations.