COURSE OVERVIEW HE0633
Certified Crane Lift Supervisor (CLS)
Crane Inspection/Operations & Tailing and Tandem Lift

Course Title
Certified Crane Lift Supervisor (CLS): *Crane Inspection/Operations & Tailing and Tandem Lift*

Course Reference
HE0633

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

Course Date/Venue

Session(s)	Date	Venue
1	February 09-13, 2025	TBA Meeting Room, DoubleTree by Hilton Doha - Al Sadd, Doha, Qatar
2	May 25-29, 2025	Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE
3	August 18-22, 2025	Fujairah Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE
4	November 23-27, 2025	Business Meeting, Crowne Plaza Al Khobar, Al Khobar, KSA

Course Description

This practical and highly-interactive course includes practical sessions and demonstration for inspection and operations of crane equipment. Theory learnt in the class will be applied using crane and various lifting equipment through hands-on practical sessions.

Crane accidents cause workplace injuries to crane operators, workers on the job site, and even the people nearby. Majority of crane accidents are caused by human errors, which may result in safety risk and uncontrollable downtime of the cranes. The accidents can be minimized or prevented through proper training and crane usage.

Periodic crane inspection is very vital program to the crane owners for the safe working of the crane and to increase productivity. The effective crane inspection program will increase productivity by reducing downtime due to unexpected breakdown, reduce insurance cost, and assist in quick acceptance by major construction sites and associations and major contractors.

Any lift involving multiple cranes is a critical lift. Tandem crane lifts are complex and dangerous as crane capacities are based on freely suspended and balanced loads. The use of two, and often more cranes, may introduce side loading of the boom not normally encountered with one crane. The load must be divided as planned and the rigging so arranged.

A lift plan including a rigging print, outlining the entire operation must be prepared. This job plan includes load calculation, crane selection, ground preparation, crane hook up, crane movements, and initial and final positions. It must be prepared by qualified and experienced personnel. The preferable team to prepare this plan will be an experienced construction engineer, a rigging superintendent, and a crane operator. All, or at least one of these people shall have previous experience on tandem lifts.

The course is designed to provide delegates with a detailed and up-to-date overview of tailing and tandem lift. It covers tandem crane lifts; tandem lift job plan; tailing cranes; tandem lift (unequal loading); lift point positions; load of each crane; tandem lift load change; tandem lift with equalizer; equalizer lift example; beam lift points; loads on each crane; and equalizer load changes.

This course will promote safety and health of persons in the workplace and of the public, comply with occupational health and safety legislations, limit the potential damage to property, reduce or eliminate risk associated with the crane operations, determine the condition of the crane parts, detect potential failures at early stages, reduce the risk of injury by potential failure and increase the crane life. The course ensures that the crane is in a safe condition and it can continue to be used for a specified period into the future.

Further, the course will discuss crane safety management system, crane selection, operational procedures and practices, crane inspection and operations and performance monitoring tools.

Course Objectives

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

- Get certified as a “Certified Crane Lift Supervisor” and apply professional techniques in crane inspection and operations
- Carryout the planning, the selection of cranes and the inspection of the personnel and lifting equipment necessary for the management of lifting operations to the required standard as defined in BS7121 Code of Practice Part 1 (General) and Part 3 2000
- Practice the correct method of handling, using and storing lifting tackle and the legal requirements applicable to the operation, maintenance, inspection and identification of cranes and lifting equipment
- Use the safe setting up of the crane and its equipment for the lifting operation and identify the purpose and capacity of lifting tackle in general use for lifting
- Define the terminology used to identify crane component parts and describe the procedure for site preparation by checking the ground condition and bearing surface and understand the function of outrigger blocking and bearing mats
- Use the load charts in crane inspection and operation including its strength and stability and demonstrate how to set-up and assemble cranes and employ boom inspection and repair

- Use crane log books, crane cab control, crane brakes and operational aids and implement the applicable safety measures when traveling with loads on each cranes
- Recognize the tandem crane lifts and lift point positions loads on each crane
- Identify the tandem lift load change, tandem lift (unequal loading) and tandem lift with equalizer
- Explain beam lift points, equalizer load changes and tailing cranes tandem lift job plan

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 crane inspection and operations for personnel who wish to be trained and appointed as a Lifting Supervisor for lifting operation using any crane (i.e. tower, mobile and gantry cranes including lorry loader with articulate arm). The course is also suitable for personnel responsible for the operation, inspection or maintenance of cranes. It combines classroom instruction with practical field exercises. Emphasis is placed on the importance of safety within the industry.

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.

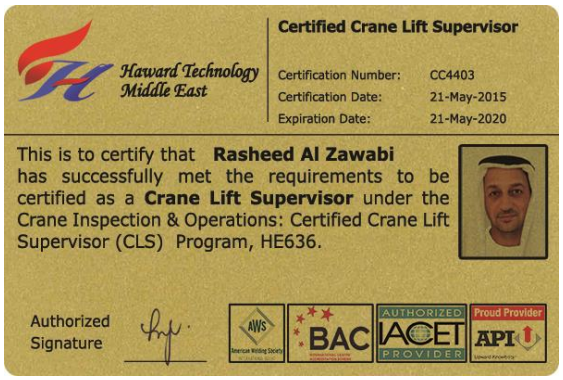
Course Certificate(s)

(1) Internationally recognized Wall Competency Certificates and Plastic Wallet Card Certificates will be issued to participants who have successfully completed the course and passed the exam at the end of the course. Successful candidate will be certified as a "*Certified Crane Lift Supervisor*". Certificates are valid for 5 years.

Recertification is FOC for a Lifetime.

Sample of Certificates

The following are samples of the certificates that will be awarded to course participants:-



Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -

- 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.

- 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.

Accommodation

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

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:

Mr. Raymond Tegman is an **International Expert** in **Lifting & Rigging Operations** with extensive experience within the **Oil & Gas**, **Petrochemical** and **Refinery** industries. His broad expertise widely covers in the areas of **Forklift** Inspection, **Forklift** Operations, **MEWP** Operations, Safe **Rigging & Lifting** Tools, **Scaffolding** Inspection, **Lifting & Slinging**, **Crane** Inspection, **Lifting & Rigging**, **Manlift** Safety Operations, **Scissor** Lift Operations, **Mobile & Overhead Crane**, Electrical Overhead Travel Crane (**EOT**), **Safe Crane Operations**, **Crane Inspection & Operations**, **Certified Crane Lift Supervisor**, **Rigging, Crane Inspection & Operations**, **Overhead Cranes Operation**, **Inspection & Maintenance**, Safety Rules, Machinery & Hydraulic **Lifting Equipment**, Handling **Hazardous Chemicals**, Spill Containment, **Fire** Protection, **Fire** Precautions, **Incidents & Accidents** Reporting, **HSEQ** Audits & Inspection, **HSEQ** Procedures, **Environmental** Awareness, **Waste** Management Monitoring, **Emergency Planning**, **Emergency** Management, **Working at Heights**, **Root Cause Analysis**, **HSE** Rules & Regulations, Process Safety Management (**PSM**), Process Hazard Analysis (**PHA**), Techniques, **HAZOP**, **HSE** Risk, **Pre-Start-up Safety** Reviews, **HSE Risk** Identification, Assessments & Audit, **HSE Risk** Assessment & Management Concepts, **HSE Management** Policy & Standards, **HSSE Emergency Response & Crisis Management** Operations, **Confined Space Entry**, **Quantitative Risk Assessment** (**QRA**), Hazardous Materials & Chemicals Handling, Safety Precaution & Response Action Plan, **Hazard & Risk** Assessment, Task Risk Assessment (**TRA**), **Incident Command**, **Accident & Incident Investigation**, **Emergency Response Procedures**, Job Safety Analysis (**JSA**), Behavioural Based Safety (**BBS**), **Fall Protection**, **Work Permit & First Aid**, Lock-out/Tag-out (**LOTO**), **Emergency Response**, **Construction** Supervision, **Scaffolding** Inspection, **HAZCHEM**, Manual Material Handling, **Road Traffic** Supervision, ISO 9001 and OHSAS 18001.

During his career life, Mr. Tegman has gained his practical and field experience through his various significant positions and dedication as the **Operations Manager**, **Safety & Maintenance Manager**, **Safety Manager**, **Road/Traffic Supervisor**, **Crane Supervisor**, **Assessor/Moderator**, **Safety Consultant**, **Safety Advisor**, **Safety Officer** and **Liaison Officer** from Zero Harm, SHRA Training & Services (Health & Safety), Road Crete, Balwin Property Development, DEME International, Gladstone Australia, Godavari Gas Pipeline and New Castle NCIG.

Course Fee

Doha	**US$ 6,000** per Delegate. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Dubai	**US$ 5,500** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Abu Dhabi	**US$ 5,500** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Al Khobar	**US$ 5,500** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

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	***Crane Safety Management System*** *Crane Incident Statistics ● Human Resources ● Proper Equipment ● Documented Procedures*
0930 – 0945	*Break*
0945 – 1100	***Crane Safety Management System (cont'd)*** *Measurement ● Assessment ● Management of Change ● Safety assessment Questionnaire*
1100 – 1215	***Crane Safety Management System (cont'd)*** *Personnel Responsibilities ● Training ● Operator Certification*
1215 – 1230	*Break*
1230 – 1420	***Crane Safety Management System (cont'd)*** *Lift Parameters ● Load Charts ● Inspection*
1420 – 1430	***Recap***
1430	*Lunch & End of Day One*

Day 2

0730 – 0930	***Crane Selection Operational Procedures & Practices*** *Crane Certification ● Maintenance ● Operator Aids ● Prequalification Process*
0930 – 0945	*Break*
0945 – 1100	***Crane Selection Operational Procedures & Practices (cont'd)*** *Lift Planning Process (Job Safety Analysis) ● Lift Assessment Process ● Daily Crane Operation Log ● Lift Evaluation Form*
1100 – 1215	***Crane Selection Operational Procedures & Practices (cont'd)*** *Critical Lift Plan ● Permits ● Special Cases ● Crane Signals*
1215 – 1230	*Break*

1230 – 1420	***Crane Selection Operational Procedures & Practices (cont'd)*** *Operational Aids ● Crane Identification ● Crane Types ● Hoisting Systems*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Two*

ssDay 3

0730 – 0930	***Crane Inspection & Operations*** *Site Preparation ● Ground Condition ● Bearing Surface ● Outrigger Blocking ● Bearing Mats ● Set-Up & Assembly ● Boom Assembly ● Boom Dismantling ● Boom Inspection & Repair ● Crane Gantry ● Crane Jibs ● Wire Rope Factors ● Reeving Load Blocks ● Out-of-Level Cranes ● Crane Stability ● Tripping Axis ● Crane Stability Factors*
0930 – 0945	*Break*
0945 – 1100	***Crane Inspection & Operations (cont'd)*** *Outriggers Positions ● Load Indicators ● Load Shape Factors ● Crane Structural Failure ● Quadrants of Operation ● Barricading swing Area ● Actual & Effective Loads ● Load on Boom ● Load on Jib ● Net & Gross Load ● Static & Dynamic Load ● Load Charts ● Load Charts/Load Indicators ● Load Chart Information ● Load Chart Strength & Stability ● Interpreting Load Chart ● Chart Values (Radius)*
1100 – 1215	***Crane Inspection & Operations (cont'd)*** *Chart Values (Boom Length) ● Chart Values (Boom Angle) ● Load Chart/Range Diagram ● Load Chart/Hoist Lines ● Load Chart/Boom Capacity ● Load Chart/Jib Capacity ● Load Chart Points ● Load Chart Examples ● Tandem Crane Lifts ● Tandem Lift Plan ● Tailing Cranes ● Unequal Crane Loads ● Conditions Affecting Capacity ● Off-Level ● Side-Loading ● Rapid Swing ● Radius Increase*
1215 – 1230	*Break*
1230 – 1420	***Crane Inspection & Operations (cont'd)*** *Wind Effect ● Impact loading ● Duty Cycle ● Traveling with Load ● Telescoping Booms ● Boom Contact Hazard ● Anti Two-Block ● Electrical Clearances ● Crane Log Books ● Crane Inspection ● Crane Manual/Records ● Crane Maintenance ● Crane Cab Controls ● Crane Operation ● Crane Safety Features ● Crane Breaks ● Operator Safety Points ● Operational Aids*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Three*

Day 4

0730 – 0930	***Performance Monitoring Tools*** *Hazard Awareness Checklist ● Crane Inspection Checklist ● Daily Inspection Checklist ● Crane Movement Checklist ● Pick & Carry Operations Checklist ● Shutdown & Security Checklist ● Crane suspended Personnel Baskets Checklist ● Lift Planning Checklist ● Crane Set-up Checklist ● Crane Load Charts Checklist ● Load and Site Factors Checklist ● Crane Selection Checklist ● OSHA Inspection Items*
0930 – 0945	*Break*
0945 – 1100	***Tandem Crane Lifts***
1100 – 1215	***Lift Point Positions Loads on Each Crane, Tandem Lift Load Change, Tandem Lift (Unequal Loading)***
1215 – 1230	*Break*
1230 – 1420	***Tailing Cranes Tandem Lift Job Plan***
1420 – 1430	***Recap***
1430	*Lunch & End of Day Four*

Day 5

0730 – 0930	***Practical Sessions***
0930 – 0945	*Break*
0945 – 1100	***Practical Sessions (cont'd)***
1100 – 1215	***Practical Sessions (cont'd)***
1215 – 1230	*Break*
1230 – 1300	***Practical Sessions (cont'd)***
1300 – 1315	***Course Conclusion***
1315 – 1415	***COMPETENCY EXAM***
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Practical Sessions/Site Visit

Site visit will be organized during the course for delegates to practice the theory learnt:-




Course Coordinator

Reem Dergham, Tel: +974 4423 1327, Email: reem@haward.org