COURSE OVERVIEW HE0510
Safe Lifting for Crane Operators

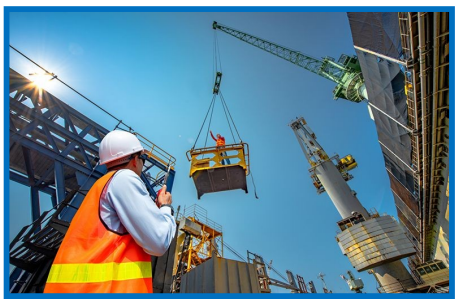
Course Title
Safe Lifting for Crane Operators

Course Date/Venue
Session 1: May 04-08, 2025/Boardroom 1,
Elite Byblos Hotel Al Barsha,
Sheikh Zayed Road, Dubai, UAE
Session 2: October 06-10, 2025/Fujairah
Meeting Room, Grand Millennium
Al Wahda Hotel, Abu Dhabi, UAE

Course Reference
HE0510

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

Course Description



This practical and highly-interactive course includes practical sessions and demonstration where participants carryout crane and lifting operations. Theory learnt in the class will be applied using a mobile crane and assorted lifting through hands-on practical sessions.

This course is designed to provide participants with a detailed and up-to-date overview of Safe Lifting for Crane Operations. It covers the cranes and derricks and the functions of crawler, locomotive and truck cranes; the difference between hammerhead tower cranes and overhead and gantry cranes; the floating cranes, derricks and the use of helicopter cranes; and the operation of material hoists, personnel hoists and elevators and base-mounted drum hoists.

During this interactive course, participants will learn the overhead hoists, conveyors, aerial lifts and hooks; the importance of hoisting personnel with cranes and derricks; the safe work practices and sling safety; the safe lifting and rigging practices; the maintenance of slings, sling operating practices and materials handling and storage; and the aspect of colour coding and inspection in materials handling and safe lifting.

Course Objectives

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

- Apply systematic techniques and procedures on cranes, lifting methods, hooks, sling as well as material handling
- Discuss cranes and derricks and the functions of crawler, locomotive and truck cranes
- Differentiate hammerhead tower cranes from overhead and gantry cranes
- Carryout floating cranes, derricks and discuss the use of helicopter cranes
- Employ operation of material hoists, personnel hoists and elevators as well as base-mounted drum hoists
- Apply good working knowledge on overhead hoists, conveyors, aerial lifts and hooks
- Recognize the importance of hoisting personnel with cranes and derricks
- Emphasize the safe work practices and explain sling safety
- Determine the safe lifting and rigging practices and explain the maintenance of slings
- Review and employ the sling operating practices and as well as materials handling and storage
- Discuss the aspect of colour coding and inspection in materials handling and safe lifting

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 safe lifting and materials handling for senior project/site personnel such as managers, engineers, superintendents, supervisors and officers.

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 Competency Certificates and Plastic Wallet Cards will be issued to participants who completed a minimum of 80% of the total tuition hours and successfully passed the exam at the end of the course.

Recertification is FOC for a Lifetime.

Sample of Certificates

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

(2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course.

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 Fee

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.

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. Karl Thanasis, PEng, MSc, MBA, BSc, is an **International Expert** in **Cranes**, **Lifting & Rigging Operations** with over **30 years** of **Onshore & Offshore** experience within the **Oil**, **Gas**, **Petrochemical** and **Power** industries. His wide expertise includes **Defensive Driving**, **Crane**, **Forklift**, **Scaffolding**, **Lifting**, **Rigging**, **Slinging**, **Banksman**, **Manual Handling**, **Lifting Equipment Inspection**, **Heavy Lifting Operations** & **Management**, **Overhead Crane**, **HSE** and **Risk Assessment** as well as **installation** and **erection** of the **Cooling Towers**, **Fired Heaters**, **Plastic Pipelines** and Steel Structured Buildings. He is also well-versed in mechanical rotary drilling, mud pumping, pipe jointing, pressure hydro-testing, high pressure water jetting, remote cleaning, pressure hydro-testing, sulphur processing, **ROV** and other **heavy equipment operations**. Further, he has a very strong **Technical** and **Site Managerial Leadership Skills** including **Production Planning**, **Scheduling**, **Construction Administration**, **Safety**, **Project Budget Development** and **Accountability**. Currently, he is the **Off-Shore Project Manager** of **DCN** in **Germany**.

Mr. Thanasis has acquired his thorough and practical experience as the **Project Manager**, **Plant Manager**, **Area Manager - Equipment Construction**, **Construction Superintendent**, **Project Engineer** and **Design Engineer**. His duties covered **Plant Preliminary Design**, **Plant Operation**, **Write-up** of **Capital Proposal**, **Investment Approval**, **Bid Evaluation**, **Technical Contract Write-up**, **Construction** and **Sub-contractor Follow up**, **Lab Analysis**, **Sludge Drying** and **Management** of **Sludge Odor** and **Removal**. He has worked in various companies worldwide in the **USA**, **Germany**, **England** and **Greece**.

Mr. Thanasis is a **Registered Professional Engineer** in the **USA** and **Greece** and has a **Master's** and **Bachelor's** degree in **Mechanical Engineering** with **Honours** from the **Purdue University** and **SIU** in **USA** respectively as well as an **MBA** from the **University of Phoenix** in **USA**. Further, he is a **Certified Internal Verifier/Trainer/Assessor** by the **Institute of Leadership & Management** (**ILM**) a **Certified Instructor/Trainer** and has delivered numerous trainings, courses, seminars, workshops and conferences worldwide.

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 - 0900	***Introduction about Cranes, Lifting Methods, Hooks, Slings***
0900 - 0930	***Cranes and Derricks*** *General Requirements • Manufacturer's Specifications and Limitations • Rated Load Capacities • Operating Speeds • Special Hazard Warnings • Instructions or Warnings • Hand Signals • Competent Person • Guarding • Barricades • Fire • Power Lines*
0930 - 0945	*Break*

0945 – 1115	***Crawler, Locomotive, and Truck Cranes*** *Jibs • ANSI • Certification Record*
1115 – 1230	***Hammerhead Tower Cranes*** *Clearances • Fall Protection • Buffers*
1230 – 1245	*Break*
1245 – 1300	***Overhead and Gantry Cranes*** *Rated Load • Bridge Trucks*
1300 – 1330	***Floating Cranes and Derricks*** *Mobile Cranes Mounted on Barges • Rated Load • Load Rating Chart • Secured • Permanently Mounted Floating Cranes and Derricks*
1330 – 1420	***Practical Session # 1***
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day One*

Day 2

0730 - 0930	***Helicopter Cranes*** *Slings and Tag Lines • Cargo Hooks • PPE • Loose Gear and Objects • Operator Responsibility • Hooking and Unhooking Loads • Static Charge • Weight Limitation • Visibility • Signal Systems • Approach Distance • Personnel • Communications*
0930 - 0945	*Break*
0945 - 1230	***Material Hoists, Personnel Hoists, and Elevators*** *General Requirements • Specifications and Limitations • Load Capacities • Wire Rope • Hoisting Ropes • Material Hoists*
1230 - 1245	*Break*
1245 - 1330	***Material Hoists, Personnel Hoists, and Elevators (cont'd)*** *Personnel Hoists*
1330 - 1420	***Practical Session # 2***
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Two*

Day 3

0730 - 0930	***Base-mounted Drum Hoists*** *Exposed Moving Parts • Electric Motor Operated Hoists • Requirements*
0930 - 0945	*Break*
0945 - 1100	***Overhead Hoists*** *Safe Working Load • Supporting Structure • Free Movement • Air Supply*
1100 - 1230	***Conveyors*** *Means for Stopping • Audible Warning Signal • Remote Point • Emergency Stop Switches • Screw Conveyors • Guards • Crossovers, • Aisles, and Passageways • Lock Out*
1230 - 1245	*Break*

1245 - 1330	***Aerial Lifts*** *General Requirements • ANSI • Types • Specific Requirements*
1330 - 1420	***Practical Session # 3***
1420 - 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Three*

Day 4

0730 - 0830	***Hoisting Personnel with Cranes and Derricks*** *OSHA Standards • Crane and Derrick Operations • Personnel Platforms*
0830 - 0930	***Safe Work Practices*** *Tag Lines • Fall Arrest System • Communication • Cranes Traveling while Hoisting Personnel*
0930 - 0945	*Break*
0945 - 1100	***Sling Safety*** *Types of Slings • Sling Inspections • Sling Load Capacity and Sling Angles • Sling Wear • Special Precautions • Inspection of Alligator Clamps • Safe Usage Practices • Importance of the Operator • Sling Types • Strength • Fatigue • Abrasive Wear • Abuse • Storage • Discarding Slings • Possible Defects*
1100 - 1230	***Safe Lifting Practices*** *Manual and Mechanical safe lifting • Size, Weight, and Center of Gravity of Load • Number of Legs and Angle with the Horizontal • Rated Capacity of the Sling • History of Care and Usage • Sample of Lifting Accidents • Types in Injuries Caused by Manual Handling*
1230 - 1245	*Break*
1245 - 1330	***Maintenance of Slings*** *Chains • Wire Rope • Fiber and Synthetic Ropes*
1330 - 1420	***Practical Session # 4***
1420 - 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Four*

Day 5

0730 - 0830	***Safe Rigging Practices*** *Job Site Considerations • Rigging Selection • Working Load Limits • Control • Unusual Loading or Environmental Conditions • Users Responsibilities*
0830 - 0930	***Basic Sling Operating Practices*** *ANSI • Competent Person • Definitions • Wire Rope Construction • Wire Rope Capacities • Wire Rope Sling Capacities • Wire Rope Sling Choker Adjustments • Types of Wire Wire Rope Slings • Type of Wire Rope Sling Damage • Synthetic Slings • Chain Slings • Rigging Protection from Cutting or Slipping • Protecting Rigging from Damage or Environment*
0930 - 0945	*Break*

0945 - 1100	***Materials Handling and Storage*** *Potential Hazards • Strains and Sprains • Fractures and Bruises • Cuts and Bruises • Methods of Prevention • Moving, Handling, And Storing Materials • Using Materials Handling Equipment • General Requirements • Fire Protection • Design • Maintenance • Use • Approval by Testing Laboratory • Modifications • "Approved Truck" • Designations of Industrial Trucks or Tractors • Atmosphere • Safety Guards • Changing and Charging Storage Batteries • Trucks and Railroad Cars • Operator Training • Truck Operations • Maintenance of Industrial Trucks • Ergonomic Safety And Health Principles • Training And Education • Exercises*
1100 - 1230	***Colour Coding and Inspection***
1230 - 1245	*Break*
1245 - 1300	***Practical Session # 5***
1300 - 1315	***Course Conclusion*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course*
1315 - 1415	***COMPETENCY EXAM (Theory & Practical)***
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

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