

EP2005 Volume 2	Lifting and Hoisting	Restricted
HSE Standard		EP2005-0264-ST

Standard: **Lifting and Hoisting**

This HSE document may set requirements supplemental to applicable law. However, nothing herein is intended to replace, amend, supersede or otherwise depart from any applicable law relating to the subject matter of this HSE document. In the event of any conflict or contradiction between the provisions of this HSE document and applicable law as to the implementation and governance of this HSE document, the provisions of applicable law shall prevail.

0. Revision Information

1. Introduction

Incidents related to lifting and hoisting operations have the potential for significant impact on people, assets, environment and reputation and in recent years have resulted in loss of life and asset damage in EP operations.

2. Scope and Application

This Standard is part of the EP2005 document suite and relates to several activities in the EP Business Model, including construction and maintenance, offshore operations, and drilling.

This Standard specifies the requirements for lifting and hoisting operations and *Lifting Equipment* applying to EP Companies and, by express contractual obligation, to their contractors. For the purpose of this Standard, contractors are taken as the provider of services or goods to EP Companies.

This Standard applies to all aspects of lifting and hoisting operations carried out using pedestal cranes, mobile cranes, overhead and gantry cranes, A-frames, jib cranes, derricks, hoists, winches, special hoist-supported personnel lifting devices, hooks, slings and rigging, lifting points, mobile aerial platforms, powered industrial trucks (forklifts), jacks, offshore containers, cargo baskets, skids, and pallets; and all lifting and hoisting operations not specifically excluded.

This Standard does not cover personnel and goods elevators in buildings, diving personnel operations, well operations involving the crown block, travelling block, and top drive systems, mining and earth moving, lumber (timber) logging, helicopter lifting, tensioners, marine towing, and manual handling. The foregoing are addressed by separate standards.

This Standard shall be used together with local government regulations, Shell Group Design and Engineering Practices (DEPs) and other recognised codes or standards as applicable [\[App. 2\]](#).

Italicised terms within this Standard are defined in [\[App. 1\]](#) and EP Specification 'EP2005 HSE Glossary of Definitions'.

3. EP POLICY

Management shall identify those critical operations and installations, which require a fully documented demonstration that risks have been reduced to ALARP.

4. EP Standard

4.1 Hierarchy of Documents

This Standard is supported by:

Doc. No.: EP200410205610	Version: E	Date: 18 March 2005	Custodian: EPS-HSE	ECCN: Not subject to EAR No US content	Page: 1 of 14
Org. Doc. No: EP2005-0264-ST			Printed copies are uncontrolled		

EP2005 Volume 2	Lifting and Hoisting	Restricted
HSE Standard		EP2005-0264-ST

- EP Specification 'Personnel Lifting' , which specifies requirements for EP Companies when developing and implementing local Controlling Documents for HSE management of personnel lifting;
- EP Guideline 'Planning and Execution of Lifting' ,which gives EP Companies guidance for developing and implementing local Controlling Documents for HSE management of planning and executing lifting and hoisting operations.

Local Controlling Documents shall implement the requirements stated as mandatory in and shall address as a minimum:

- Roles and responsibilities of personnel involved in lifting and hoisting;
- Competency and training;
- *Lifting Equipment*;
- Operating procedures and practices;
- Applicable standards.

4.2 Roles and Responsibilities and Competence Assurance

The roles and responsibilities of all personnel involved in lifting and hoisting shall be defined together with their respective competency. These definitions shall address:

- Role and task description;
- Training and experience requirements; and
- Criteria for maintaining competency.

Roles, HSE critical tasks and generic competence requirements for lifting operations are listed in [\[App. 4\]](#). These shall be used, taking local regulations into account, to develop local task descriptions and competency requirements for lifting and hoisting. The EP Standard 'Competency Assurance of HSE Critical Positions' shall be applied to manage competency in these roles.

Records of qualified personnel shall be maintained and shall be available for audit.

Additional support and/or supervision shall be provided for temporary workers, new personnel and short service employees, as they are likely to have less knowledge, experience and awareness of the requirements of the job and the associated hazards.

Site Manager

The Site Manager shall identify a PIC for each lifting operation. A person of suitable competence and qualification appointed by the company responsible for a site (e.g. a vessel, a platform, a land location) to oversee and approve all operations on this single location, on behalf of all personnel working on it. Examples include the Master of the Vessel, or the Offshore Installation Manager (OIM) of a platform.

Person-in-Charge of the Lift (PIC)

The PIC shall make himself known to all persons directly involved in the lift and to those involved in concurrent operations, which could interact with it. The PIC shall coordinate and control all aspects of the lifting operation, including ensuring that every person involved is competent to perform their task and is aware of the task, the procedures to be followed, and their responsibilities.

Doc. No.: EP200410205610	Version: E	Date: 18 March 2005	Custodian: EPS-HSE	ECCN: Not subject to EAR No US content	Page: 2 of 14
Org. Doc. No: EP2005-0264-ST			Printed copies are uncontrolled		

EP2005 Volume 2	Lifting and Hoisting	Restricted
HSE Standard		EP2005-0264-ST

4.3 Planning and Execution of Lifting Operations

4.3.1 General Requirements

Guidance on planning and execution of lifting operations is given in separate documents
Guidance

4.3.2 Planning

Risk Assessment

The HEMP process defined in EP Standard 'Hazards and Effects Management Process' shall be applied to every lifting operation, which may be an individual lift or a group of routine repetitive lifts or a *Routine Lift*, and shall address:

- Planning the lift;
- Identifying the hazards and restricted areas;
- Selecting competent personnel;
- Specifying the minimum number of people to conduct the lifting operation
- Selecting *Lifting Equipment*;
- Communicating lift requirements and hazards;
- Procedures for changing the *Lift Plan*;
- Emergency, recovery and contingency plans.

Work Environment Conditions

Environment conditions specific to the work location shall be identified and accounted for in the planning and execution of all lifting operations. Whenever there is a reasonable chance of changes in environmental conditions, contingency plans and procedures shall be developed as part of the work planning.

Parameters to be addressed may include sea state, weather, visibility, noise, communications, terrain stability or slope, surrounding operations and installations, and site access and egress.

Simultaneous nearby operations and their work environment conditions that could impact or be impacted by the lift shall be identified and addressed in the risk assessment. Controls shall be established, including criteria for suspending operations, and communicated to all relevant personnel.

Categorisation of Lifting Operations

Lifts should be categorised and controlled according to complexity and risk. Guidance on categorisation and associated controls is provided .

Lift Plan

For all lifts a *Job Safety Analysis (JSA)* and a *Lift Plan* (or the approved local equivalents) shall be prepared and documented. Guidance on preparation of a *Lift Plan* is provided . *Lift Plans* shall specify conditions under which work shall not be continued, including unplanned loss of communications, and the associated contingency plans for ensuring a safe situation is created if the lift is stopped.

For *Routine Lifts*, the *JSA* and *Lift Plan* may be generic. Generic *JSAs* and *Lift Plans* shall specify each type and location(s) of lift they cover.

For Non-Routine Lifts, dedicated (i.e. not generic) *Lift Plans* and *JSAs* are required.

4.3.3 Execution

A *Toolbox Talk* shall be held to ensure that all personnel involved in the lift fully understand the *JSA* and *Lift Plan*. Prior to all lifts (*Routine Lifts* and *Non-Routine Lifts*) the PIC shall verify that the answers to the following '10 questions for a safe lift' are all addressed.

Doc. No.: EP200410205610	Version: E	Date: 18 March 2005	Custodian: EPS-HSE	ECCN: Not subject to EAR No US content	Page: 3 of 14
Org. Doc. No: EP2005-0264-ST			Printed copies are uncontrolled		

EP2005 Volume 2	Lifting and Hoisting	Restricted
HSE Standard		EP2005-0264-ST

<p>10 Questions for a Safe Lift</p> <ol style="list-style-type: none"> 1. Is everyone aware of and do they fully understand the lifting and hoisting procedures applicable to the lift? 2. Has everyone attended the toolbox talk? 3. Has a pre-use inspection of the <i>Lifting Equipment</i> been carried out and are the <i>Lifting Accessories</i> tagged or marked with: <ul style="list-style-type: none"> ➤ <i>Safe Working Load</i> ➤ A unique identification number ➤ A valid certification date 4. Are all safety devices working? 5. Does everyone know the Person-in-Charge of the lift? 6. Is everyone competent and aware of his or her tasks? 7. Is there a current <i>Lift Plan</i> and <i>JSA</i> and does everybody understand the job and precautions? 8. Does everyone know the environmental limits (e.g. maximum permissible wind speed) for the lift? 9. Is the lift area controlled and is everyone clear if the load falls or swings? 10. Are signalling methods and communication agreed and clear to you?
--

Controlling Access to the Lift Area

Access to the work area(s) and to the *Lifting Equipment* shall be appropriately controlled, which may include the use of security measures and barriers.

No personnel shall be allowed under a load without an independent second barrier in place. A full risk assessment must be carried out to ensure the barrier is sufficient, access is controlled, and failure of the primary restraint, e.g. the crane or rigging, will not result in the injury of personnel.

4.4 Personnel Lifting

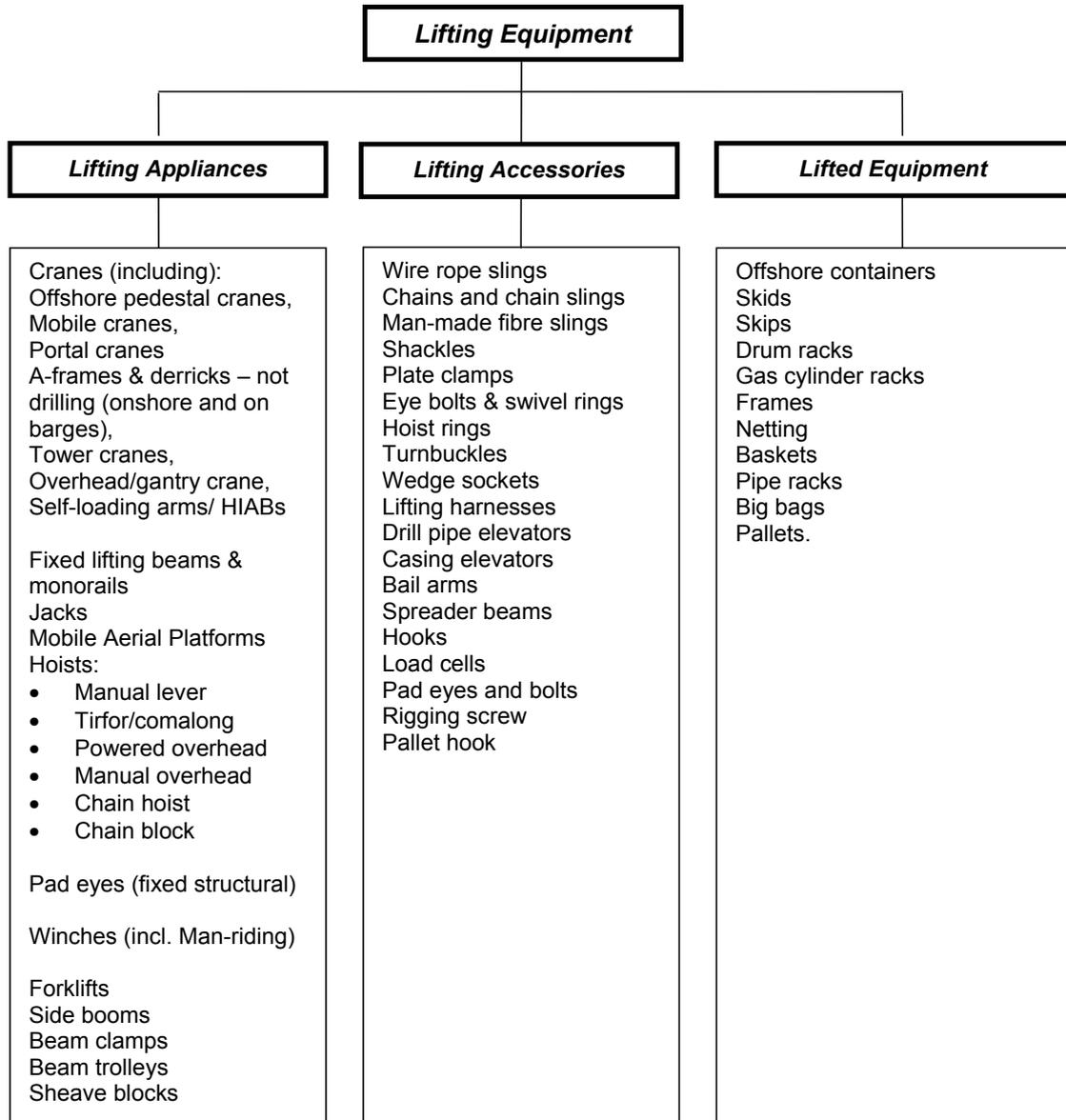
Personnel lifting operations are not the preferred option and shall only be used if shown to be ALARP. Personnel lifting operations shall be:

- Categorised as *Non-Routine Lifts*;
- Authorised in writing by the Site Manager;
- In compliance with EP Specification 'Personnel Lifting' .

Doc. No.: EP200410205610	Version: E	Date: 18 March 2005	Custodian: EPS-HSE	ECCN: Not subject to EAR No US content	Page: 4 of 14
Org. Doc. No: EP2005-0264-ST			Printed copies are uncontrolled		

4.5 Lifting Equipment

Lifting Equipment comprises *Lifting Appliances* (equipment performing the lifting), *Lifting Accessories* (devices which connect the load to the *Lifting Appliance*) and *Lifted Equipment*. The diagram below includes the main categories but is not comprehensive.



The following measures, discussed in subsequent sections, are used to ensure that *Lifting Equipment* is of adequate strength and suitable for safe operation:

- Design and Certification
- Maintenance
- Testing
- Inspection
- Registration
- Storage.

EP2005 Volume 2	Lifting and Hoisting	Restricted
HSE Standard		EP2005-0264-ST

4.6 Design and Certification of *Lifting Equipment*

To ensure that equipment is fit for purpose, local Controlling Documents shall address design, certification, maintenance, and inspection criteria in accordance with a recognised standard and/or manufacturer's recommendations.

The manufacturer or an approved certification body shall issue a certificate or a letter of conformance to appropriate standards. An overview of recognised design standards for *Lifting Equipment* is provided in [\[App. 2\]](#).

Lifting Appliances

The manufacturer shall supply all *Lifting Appliances* with documentation that defines the permissible operating conditions, design criteria, documentation of testing, maintenance requirements, and examination and inspection requirements.

Where local legislation permits, Shell DEPs shall be used as the default standard for pedestal cranes.

Engineered lifting devices (e.g. spreader bars, abandonment/recovery hooks, Remote Operated Vehicle rigging) shall be designed, manufactured, and tested in compliance with the intent of the relevant industry standards [\[App. 2\]](#).

Each *Lifting Appliance* shall be marked to show:

- Safe Working Load (SWL);
- Unique identification number;
- Date of last certification and/or date of next certification.

Lifting Accessories

All *Lifting Accessories* shall comply with applicable international standards and industry-accepted codes of practice [\[App. 2\]](#) and be marked in the same manner as *Lifting Appliances*, see above.

Lifted Equipment

All *Lifted Equipment* be designed, manufactured, inspected, tested, and certified in accordance with applicable international standards and industry-accepted codes of practice [\[App. 2\]](#).

ISO-type shipping containers are not designed for and hence not acceptable for offshore dynamic lifts.

All engineered lifting points shall be certified.

Any *Lifted Equipment* units not certified to an accepted code shall be structurally verified by a qualified engineer and load tested.

4.7 Maintenance of *Lifting Equipment*

The maintenance strategy shall be based on manufacturer's recommendations, operating experience and integration of preventative and predictive maintenance techniques Maintenance activities shall include a review of spare part requirements.

4.8 Testing of *Lifting Equipment*

4.8.1 Proof Load Testing

For all new *Lifting Equipment* proof load testing shall be carried out prior to first use unless a test certificate or letter of conformity is supplied with the equipment. Proof load testing shall comply with the requirements in [\[App. 3\]](#). The consequences of failure during testing shall be assessed and controlled.

Doc. No.: EP200410205610	Version: E	Date: 18 March 2005	Custodian: EPS-HSE	ECCN: Not subject to EAR No US content	Page: 6 of 14
Org. Doc. No: EP2005-0264-ST			Printed copies are uncontrolled		

EP2005 Volume 2	Lifting and Hoisting	Restricted
HSE Standard		EP2005-0264-ST

Where existing *Lifting Equipment* is significantly altered or a major repair to components in the load path is carried out, a proof load test shall be conducted. Deviation from this recommendation shall be documented in the equipment records. Proprietary test rigs should be used for proof testing of *Lifting Accessories* (e.g. cranes should not be used for this purpose).

4.8.2 Routine Function Testing

Testing shall include periodic function testing to verify operability and shall include safety systems and equipment (e.g. alarms and cut-outs).

4.9 Inspection of *Lifting Equipment*

Inspections shall be carried out by a qualified inspector and shall comply with local Controlling Documents identifying the inspection frequency and acceptance/rejection criteria.

4.9.1 Periodic Inspections

A qualified inspector shall inspect all *Lifting Equipment* periodically.

Inspection intervals should not exceed those listed in [\[App. 3\]](#) and in any case shall not exceed 12 months. Inspections shall also be conducted if the integrity of the equipment may have been affected due to:

- Involvement in an incident;
- Exposure to overloads;
- Modification or repair;
- Change in condition of use.

Records of all inspections shall be maintained and shall be available for inspection.

4.9.2 Pre-Use Inspection

Prior to each use all items of *Lifting Equipment* shall be visually inspected by the PIC or a competent person to ensure, so far as is practicable, it is in a good state of repair and safe to carry out the lifting activity. In addition, pedestal cranes shall be function tested prior to use.

4.10 Register of *Lifting Equipment*

A register recording the following data shall be maintained for all *Lifting Equipment*:

- Manufacturer and description;
- Identification number;
- SWL;
- Date when the equipment was first taken in use;
- Particulars of defects and steps taken to remedy them;
- Dates and numbers of certificates of tests, inspections, and examinations, and name of person who performed these;
- Due dates for previous and next periodic inspection or periodicity of inspections;
- Maintenance Log.

This may be done either in a dedicated register and/or as part of a maintenance management system (e.g. SAP).

4.11 Storage of *Lifting Equipment*

Loose Lifting Equipment shall be stored in a dedicated area (where practical, covered, dry or otherwise protected from the environment). Equipment shall be stored in such a manner as to avoid mechanical damage, corrosion, chemical exposure, etc.

Doc. No.: EP200410205610	Version: E	Date: 18 March 2005	Custodian: EPS-HSE	ECCN: Not subject to EAR No US content	Page: 7 of 14
Org. Doc. No: EP2005-0264-ST			Printed copies are uncontrolled		

EP2005 Volume 2	Lifting and Hoisting	Restricted
HSE Standard		EP2005-0264-ST

5. Performance Indicators

- Number of incidents related to lifting and hoisting.

6. Related EP Controlling Documents

#	Title
1.	Specification 'Personnel Lifting'
2.	Guideline 'Planning and Execution of Lifting'
3.	Specification 'HSE Glossary of Definitions'
4.	Specification 'HSE Roles and Responsibilities'
5.	Standard 'Contractor HSE Management'
6.	Standard 'Competency Assurance of HSE Critical Positions'
7.	Standard 'HSE Controlling Documentation Management'
8.	Standard 'Hazards and Effects Management Process (HEMP)'
9.	HSE Manual 'Job Hazard Analysis'

7. Other References

#	Title
20.	Pedestal Cranes (Amendments/Supplements to Lloyd's Code and BS 2573)
21.	Pedestal Cranes (Amendments/Supplements to API RP2C)
22.	EP Business Model

Doc. No.: EP200410205610	Version: E	Date: 18 March 2005	Custodian: EPS-HSE	ECCN: Not subject to EAR No US content	Page: 8 of 14
Org. Doc. No: EP2005-0264-ST			Printed copies are uncontrolled		

Appendix 1: Glossary of Terms

<i>Job Safety Analysis (JSA/JHA)</i>	Also known as a Job Hazard Analysis (JHA) is a process for discussing and documenting each step of a job, identifying the existing or potential HSE hazards and then determining the best way to perform the job to reduce or eliminate the hazards. The JSA/JHA will typically include: <ul style="list-style-type: none"> • Selecting the job to be analysed; • Breaking the job down into a sequence of steps; • Identifying potential hazards; • Determining preventive measures to overcome these hazards; • Identifying the resources required, i.e. manpower and equipment, to execute the task safely.
<i>Lift Category</i>	A categorisation of lifting operations (i.e. <i>Routine Lifts</i> and <i>Non-Routine Lifts</i>) reflecting the risk of the lifting operation and the required level of control.
<i>Lift Plan</i>	The <i>Lift Plan</i> details of how the lifting operations should be undertaken, the <i>Lifting Equipment</i> and <i>Lifting Accessories</i> to be used, how the equipment and <i>Lifting Accessories</i> shall be rigged up and the control measures in place to manage the risks.
<i>Lifted Equipment</i>	Any device which is used to suspend the load, including containers, tanks, skips, skids, drum rackets, pipe racks, frames, gas cylinder racks, pallets, flexible industrial bulk containers ('big bags'), tree cages, cargo nets, and cargo baskets.
<i>Lifting Accessories</i>	Any device which is used or designed to be used directly or indirectly to connect a load to a <i>Lifting Appliance</i> and does not form part of the load e.g. slings, hooks and fittings, swivels, shackles, eye-bolts, rigging screws, wedge sockets, plate clamps, and spreader beams.
<i>Lifting Appliances</i>	Any mechanical device capable of raising or lowering a load, e.g. cranes, forklift trucks, powered hoists, manual hoists, lever hoists, beam trolleys, beam clamps, sheave blocks, winches, runway beams, mono-rail hoist, etc.
<i>Lifting Equipment</i>	<i>Lifting Equipment</i> comprises <i>Lifting Appliances</i> (equipment performing the lifting), <i>Lifting Accessories</i> (devices which connect the load to the lifting appliance), and <i>Lifted Equipment</i> .
<i>Loose Lifting Equipment</i>	<i>Lifting Equipment</i> that is portable enough so that it can easily be moved or carried by a person(s) to/from a store / location to a worksite to conduct a lifting operation. This may include <i>Lifting Appliances</i> (e.g. manual lever hoists, chain falls, beam clamps etc) and <i>Lifting Accessories</i> (e.g. slings, shackles etc.)
<i>Management of Change</i>	A process to ensure that appropriate review, approval, implementation, and tracking is in place to manage changes to the planned activities.
<i>Non-Routine Lifts</i>	All lifts not classified as <i>Routine Lifts</i> .
<i>Pre-use Inspection</i>	A visual check and, if necessary, a function check of the <i>Lifting Equipment</i> by a competent person before each use. In determining the suitability and scope of the inspection, reference should be made to information such as manufacturer's instructions and relevant industry standards.
<i>Personnel Platform/ Carriers</i>	A <i>Personnel Platform</i> is designed and intended to give access to a work place at height for personnel and their tools and equipment to carry out minor work or inspections at a limited time. The platform is not designed for the actual transfer of personnel or to be used as a hoisting or lifting tool.
<i>Routine Lifts</i>	These are lifts involving loads of known or evaluated weight, shape and centre of gravity. The <i>Routine Lift</i> will be performed in normal environmental conditions (e.g. not in adverse weather) using standard rigging arrangements. Examples of <i>Routine Lifts</i> are loading/off-loading supply vessels and vehicles, moving grocery boxes, lifting re-bar, and delivering concrete by skip.
<i>Toolbox Talk</i>	<i>Toolbox Talk</i> , also known as 'Toolbox Meeting' and 'Tailgate Meeting', is required to be carried out for all work with significant safety exposure. The <i>Toolbox Talk</i> must be done at the work site. It is the final check in the hazard assessment process and the start of the implementation of the work. The

EP2005 Volume 2	Lifting and Hoisting	Restricted
HSE Standard		EP2005-0264-ST

	<i>Toolbox Talk</i> shall cover the work plan, the hazards, the controls, roles & responsibilities, and any recovery measures to be taken if the controls are not completely effective.
<i>Safe Working Load (SWL)</i>	The maximum load (as determined by a competent person) which an item of <i>Lifting Equipment</i> may raise, lower or suspend under particular service conditions , e.g. the <i>SWL</i> can be lower than, but can never exceed, the <i>WLL</i> . Normally <i>SWL</i> = <i>WLL</i> unless the <i>Lifting Equipment</i> has been de-rated.
<i>Working Load Limit (WLL)</i>	The maximum load, determined by the manufacturer, which an item of <i>Lifting Equipment</i> is designed to raise, lower or suspend. Some standards and documents refer to <i>WLL</i> as the 'maximum <i>SWL</i> '.
<i>Blind Lift</i>	A lift where at any point in time during the lifting operation the crane operator cannot directly see the load.

Doc. No.: EP200410205610	Version: E	Date: 18 March 2005	Custodian: EPS-HSE	ECCN: Not subject to EAR No US content	Page: 10 of 14
Org. Doc. No: EP2005-0264-ST			Printed copies are uncontrolled		

Appendix 2: Applicable Codes

The following internationally-recognised authorities and/or national standards are suitable for lifting and hoisting operations. The EP Companies shall identify the applicable standards during the development of their own local Controlling Documents to implement the Standard requirements.

American National Standards Institute	ANSI
American Petroleum Institute	API
American Society of Mechanical ASME Engineers	ASME
Australian Technical Standards	ATS
British Standards Institute	BSI
Canadian Technical Standards	CTS
Code of Federal Regulations	CFR
Det Norske Veritas	DNV
The Provision and Use of Working Equipment Regulations, UK	PUWER
Lifting Operations and Lifting Equipment Regulations	LOLER
European National Standard	En
International Standards Organisation	ISO
Lloyds Register	
Occupational Safety and Health Administration	OSHA
Gosudarstvennyye Standarty State Standard (Russian Technical Standards)	GOST

Appendix 4: Level 1 HSE Critical Tasks and Competencies in Lifting Operations

Role	Responsibilities/Tasks	Qualification/Competency/Skills
All Roles	A designated individual that conforms to a minimum physical condition, level of competency, and has a documented trail issued by an accepted and recognised authority, satisfying legal and EP Company requirements and demonstrating the aforementioned; and is deemed qualified to perform safe lifting/rigging operations.	<p>Qualified personnel must have successfully attended a specific training course that meets the requirement of national standards and must be trained on the specific <i>Lifting Equipment</i> type.</p> <p>Where the national standard qualification and competence/skill requirements are inadequate with reference to the accepted codes defined in [App. 2] one of the accepted codes shall be used to develop the EP Company lifting and hoisting competency requirements.</p>
Crane Operator Overhead Cranes	<ul style="list-style-type: none"> To be responsible for the crane operations under his/her control; To perform crane inspections with the exception of the initial, quarterly and annual inspections; To duly complete all required crane operation logs, pre-use inspection procedures and checks; The crane operator satisfies himself that the lift plan, equipment, and accessories are safe, and operates the <i>Lifting Equipment</i>. 	Personnel shall be re-certified at intervals not greater than every five (5) years.
Crane Operator Mobile Cranes		Personnel shall be re-certified at intervals not greater than every five (5) years.
Crane Operator Offshore Pedestal Cranes		Personnel shall be re-certified at intervals not greater than every four (4) years.
Powered industrial truck (forklifts) operator	<p>A designated individual that conforms to a minimum physical condition, level of competency, and has a documented trail issued by an accepted and recognised authority, satisfying legal requirements and demonstrating the aforementioned and is deemed qualified to perform safe forklift operations:</p> <ul style="list-style-type: none"> Perform a pre-operational check to demonstrate operational readiness of the truck; Ensure the equipment is within inspection and testing intervals by examination of the periodic re-certification tags and/or documentation; Adhere to all tags on the controls; Drive at speeds appropriate for the existing conditions (space, load, lighting, surface conditions, etc.) and at or below posted limits; Ensure other personnel are not in the swing radius prior to performing turning manoeuvres. 	<p>Personnel shall be re-certified at intervals not greater than five (5) years.</p> <p>The training syllabus for powered industrial truck operators must comprise a major element of practical instruction / examination in addition to the written examination.</p>
Banksman (Flagman, Signaller)	<p>A designated individual who:</p> <ul style="list-style-type: none"> Coordinates the lifting movements and maintains radio- and/or visual communication with crane operator and persons close to the load; Participates in JSA/risk assessment for the lift; Should not get involved as Rigger when also performing the role of a Banksman. 	Has successfully completed training programme(s) that are appropriate to the lifts they are involved with that incorporates familiarisation with rigging hardware,
Slinger/Rigger (cranes)	<p>A designated individual who:</p> <ul style="list-style-type: none"> Shall inspect the rigging; May contribute to selecting rigging to suit the load; 	

Role	Responsibilities/Tasks	Qualification/Competency/Skills
	<ul style="list-style-type: none"> Connects/disconnects the load; Participates in <i>JSA</i>/risk assessment for the lift. 	slings, communication (including hand signals and radio) and safety issues associated with rigging and lifting loads, and planning of lifting operations.
Rigger (portable <i>Lifting Equipment</i>)	<p>A designated individual who for portable <i>Lifting Equipment</i>:</p> <ul style="list-style-type: none"> Inspects the rigging, selects rigging to suit the load, installs the equipment; Connects/disconnects the load; Participates in <i>JSA</i>/risk assessment for the lift. 	
Mobile Aerial Platform Operator	<p>A designated individual who drives and operates aerial platforms (e.g. cherry pickers, scissor platforms):</p> <ul style="list-style-type: none"> To duly complete all required operation logs, pre-use inspection procedures and checks; Performs a pre-operational check to demonstrate operational readiness; Assesses the stability of the ground and environmental conditions are within operating procedures; Tests the communication system; Verifies that the lifted personnel wear the required Personal Protection Equipment (PPE) for the lift. 	<p>Has successfully completed training programme(s) that</p> <ul style="list-style-type: none"> Are appropriate to the lifts involved Incorporate(s) familiarisation with equipment and: <ul style="list-style-type: none"> Mobile aerial platform safety; Working at heights; Fall protection; Pre-operational checks; Operating requirements.
Person-in-Charge (PIC) of the Lift	<p>Appointed by the Site Manager as the designated individual who is responsible:</p> <ul style="list-style-type: none"> For coordination and control of the lifting operation, including ensuring that involved people are competent for performing their task, aware of the task, aware of the procedures to be followed, and aware of their responsibilities; Ensuring that the <i>Lifting Equipment</i> is inspected and appropriate for use; That the <i>JSA</i> is followed; Ensuring that <i>Toolbox Talk</i> is held prior to the lift. 	Skilled in the application of the legal and EP Company requirements relevant to the planning and execution of lifts they are involved with.
<i>Lifting Equipment</i> Maintainer	<p>A designated individual who is responsible for performing maintenance of <i>Lifting Equipment</i> to ensure its technical integrity in accordance with legal and EP Company maintenance requirements.</p>	<p>Maintenance of <i>Lifting Equipment</i> shall be carried out by suitable qualified and competent personnel with adequate knowledge in the following areas:</p> <ul style="list-style-type: none"> Awareness of the relevant standards and regulations; Site specific requirements and procedures; Maintenance requirements on all types of <i>Lifting Equipment</i> to be maintained; Inspection frequency requirements; Detailed inspection requirements for all <i>Lifting Equipment</i>; Discard criteria; Disposal processes for failed equipment.