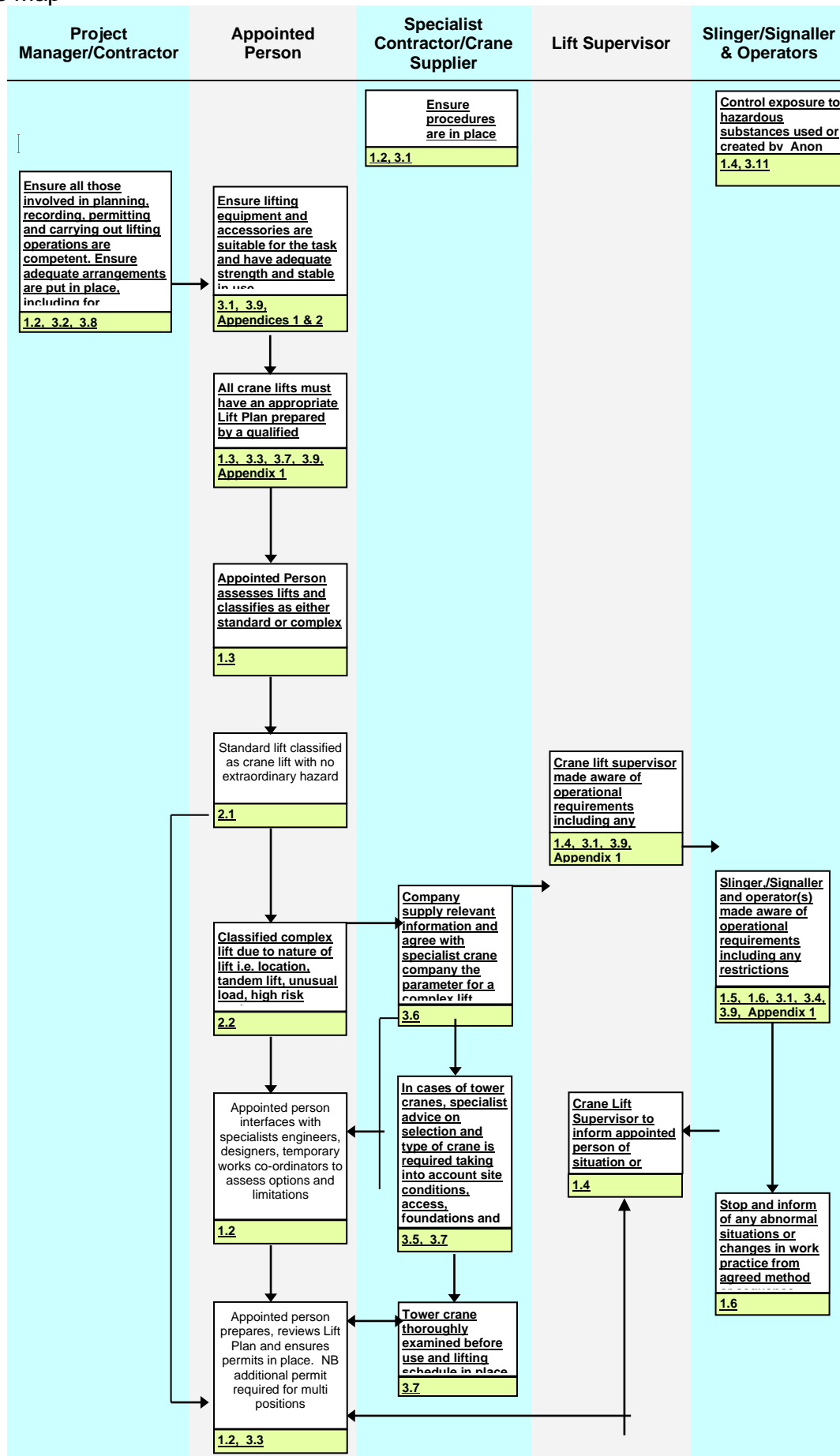


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Part 2.3.10: The Safe use of Cranes & Other Lifting Appliances

Process Map



Key

Activity
Guidance

PURPOSE

1 The purpose of this procedure is to ensure the correct selection, safe use and maintenance of all lifting equipment and lifting accessories as prescribed in the Lifting Operations and Lifting Equipment (LOLER) section of the Qatar Regulatory Document (Construction).

SCOPE

1 This procedure covers all **COMPANY Projects** and locations under the control of **COMPANY**. A **COMPANY** is defined as the organization with responsibility for management of safety at a construction site.

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2.3.10.1 Responsibilities

1 The following duty holders must be appointed for all crane operations in accordance with current guidance and their responsibilities are detailed below :

SHE DIRECTOR

- 1 Authorises this procedure

PROJECT/SITE MANAGER

- 2 Their responsibilities are as follows:

- (a) Ensure this procedure is implemented for all types of lifts.
- (b) Ensure appropriate measures are in place for the control of change for risk assessment/method statements.
- (c) Ensure the COMPANY nominate an authorised person to sign off Crane Permit to Lift.
- (d) Ensure all persons involved in the planning and carrying out of lifting operations are competent.
- (e) Ensure a COMPANY person is appointed to co-ordinate the relevant plans, permits, forms and associated paperwork for the COMPANY filing system.

APPOINTED PERSON (LIFTING OPERATIONS)

- 3 The Appointed Person will ensure that :

- (a) The assessment and planning of lifting operations is undertaken and complies with the requirements of the COMPANY lifting operations procedure.
- (b) The Crane Team is appointed and all are made aware of authorities and responsibilities.
- (c) There is an effective line of communication back to him in the event he is not present at the lift.
- (d) Close liaison is maintained with the technical crane suppliers throughout the installation, operational and dismantling phases of tower cranes.
- (e) Lifting operations are reviewed following advice from the Crane/Lift Supervisor/Signaller/Slinger on any matters of change in arrangements, and that the Permit to Lift and Risk Assessment are amended accordingly.

LIFT SUPERVISOR

- 4 The Lift Supervisor will :

- (a) Act as a key member of the Crane Team and report to the Appointed Person as leader of that team, including details of any change in activities or arrangements.
- (b) Ensure that the Slings/Signallers, the Crane Operator and any other person involved in the lift are familiar with and follow the safe system of work and the details and limitations recorded in the lifting plan.
- (c) Ensure that Tower Crane Operators' working hours do not exceed the operating criteria.
- (d) Ensure that Crane Operators are suitably trained and competent.
- (e) Ensure the safe working load (SWL) is never exceeded, other than for the express purpose of testing a crane under the supervision of a competent person. There are no exceptions to this.
- (f) Ensure cranes do not operate in any weather conditions that exceed the limit stated for that type of crane.

Part 2.3.10: The Safe use of Cranes & Other Lifting Appliances

- (g) Ensure that man-riding is never carried out unless it is part of the agreed safe system of work.
- (h) Ensure grab work, demolition balling or pile driving are only performed by machines specially adapted and intended for these purposes.

SLINGER/SIGNALLER

5 The Slinger/Signaller will :

- (a) Read, understand and comply with the lifting plan and take instruction from the Lift Supervisor.
- (b) Establish weights, balance loads and judge distances, heights and clearances.
- (c) Select the correct lifting gear in suitable condition for the loads to be lifted, reporting any defects where necessary.
- (d) Adopt correct slinging techniques.
- (e) Give precise and clear instructions to the Lifting Equipment Operator.
- (f) Initiate and direct the safe movement of the crane and load.
- (g) Signallers shall be identified on site by their orange hi-vis tabards and/or orange helmets.
- (h) Stop operations if any changes to the agreed method are undertaken or required.

OPERATORS

- 6 Ensure they are in possession of and have been briefed on the Permit to Lift and have signed the relevant section.
- 7 Position the crane, as instructed, in accordance with the Permit to Lift.
- 8 Operate in accordance with the Permit to Lift.
- 9 Inform the Lift Supervisor/Signaller/Slinger if any problems arise which would affect the lifting operation.
- 10 Operate the crane in accordance with the crane's operating instructions.

2.3.10.2 Definitions**STANDARD LIFT**

- 1 Any lift using lifting equipment. 2.2 Complex Lift
- 2 A lift where the lifting operation requires more than one crane to lift the load, or cranes using load enhancement attachments (super lift etc), or the lift is to take place at a location with exceptional hazards, e.g. chemical plant or lifting loads on or near live equipment, including Rail Infrastructure.

CONTRACT LIFT

- 3 **COMPANY** may enter into a contract with a third party (usually a crane hire company) who will undertake the work on its behalf. Before entering into such a contract, **COMPANY** has a duty to satisfy itself that the third party has the necessary competence to carry out the work in accordance with the requirements of BS 7121.
- 4 In a Contract Lift the crane hire company will plan the lift, select a suitable crane, specify the slinging and signalling arrangements, supervise the lift and be responsible for the lifting operation.

CRANE HIRE ARRANGEMENTS

5 In a crane hire arrangement (including tower cranes), the crane and operator will work to the client's instructions. Under this arrangement, **COMPANY** will plan the lift and specify the slinging and signalling arrangements, supervise the lift and be responsible for the lifting operation.

LIFTING EQUIPMENT

6 Lifting equipment means work equipment used to lift or lower loads (cranes, hoists, tele handlers, vehicle mounted lifting arms i.e. 'Hiab' etc) and includes the attachments for the anchoring, fixing or supporting of lifting equipment.

7 Should an excavator be used for lifting materials, other than for excavated material or fill, then by definition it becomes lifting equipment (eg. an excavator used to lift and lower a manhole section in position).

LIFTING ACCESSORIES

8 Lifting accessories are items of work equipment used to attach loads to lifting equipment, eg. chains, shackles, strops, slings, eye-bolts, spreader beams, etc.

2.3.10.3 Action Required To Implement This Procedure

1 Lifting operations if not properly planned, managed and executed can result in accidents, serious incidents or fatalities.

GENERAL REQUIREMENTS

- 2 The Lifting Operations and Lifting Equipment requires the appointment of Duty Holders to ensure:
- (a) All lifting operations are properly planned, managed and executed.
 - (b) Those involved in lifting operations are competent.
 - (c) All crane lifts must be planned and approved by an Appointed Person.
 - (d) The risks from lifting operations are assessed and lifting equipment and lifting accessories selected and used are suitable for the task. When in use, the equipment must be stable and the safe working load of equipment and accessories **MUST NEVER** be exceeded.
 - (e) Lifting equipment is inspected, maintained and thoroughly examined as required.
 - (f) Lifting accessories (eg. chains, shackles, strops) are thoroughly examined every 6 months.
 - (g) Any lifting accessory found not to have a current test certificate should be taken out of service immediately and be quarantined and clearly marked for re-testing or disposal.
 - (h) Any defects found must be reported to the person in control of the lifting operation immediately so that appropriate action can be taken to repair or replace the equipment or otherwise ensure that potential dangerous equipment is withdrawn from use as soon as possible.
 - (i) The safe working load must be marked on the lifting equipment. Where the configuration of the lifting equipment can be altered, affecting the safe working load, there must be adequate information to determine the safe working load in the different configurations.
 - (j) Lifting equipment and accessories that are used for lifting persons must be marked to indicate this fact.
 - (k) Consider the positioning and installation of lifting equipment, site conditions for proximity hazards, eg. overhead cables, space availability, and suitability of the ground or foundations eg. for outriggers in consultation with the manufacturer's information.
 - (l) Ensure that there is a plan in place that also considers a safe system of work to prevent persons being trapped, eg. physical barriers to prevent access to restricted areas. Refer to

the Temporary Works Co-ordinator if necessary.

- (m) The COMPANY Regional SHE Adviser is advised in advance, of any intention to carry out man-riding. (See also Appendix 1 – General Rules for the Use of Cranes).
- (n) Where there is more than one Appointed Person allocated to a project, then appropriate communications to co-ordinate any interfaces should be put in place and a 'lead appointed person' nominated.

3 See also: Appendix 1 – General Rules for the Use of Cranes.

4 Appendix 2 – Table of examinations and inspections.

LIFTS OTHER THAN CRANE LIFTS

5 Other than crane lifts, numerous operations fall under the category of lifting operations as per the Lifting Operations and Lifting Equipment (LOLER). These may include :

- (a) Fork Lift Trucks
- (b) Excavators (used as lifting devices).
- (c) Hoists & material lifting equipment (all types).
- (d) Hiab (or vehicle mounted lifting arm) operations. See SHE-FRM-10-06
- (e) Scaffold Pulley Wheels (Gin Wheels).
- (f) Working platforms i.e. MEWP's, Mast Climbers

6 For lifting appliances other than cranes or Hiab, the checklist in form **SHEFRM-10-05** should be considered.

7 Where the above does not cover the type of lift or equipment involved, the person managing the lift should consult with the manufacturer, supplier or a member of the SHE team to establish and record a safe system of work.

CRANE LIFTS

8 A Lift Plan must be received from the **Appointed Person** responsible for a Contract Lift carried out by a third party. Note: The lift plan must include a detailed layout plan.

9 All lifting plans must be verified using the 'Control of Lifting Operations – Permit to Lift Checklist' to ensure all associated documents are included and authorised by the Appointed Person.

10 Once these checks are signed off the 'Control of Lifting Operations – Permit to Lift' can then be issued by the nominated person to authorise commencement of lifting operations. Note that in cases where the crane moves location (multiple crane position) around site then the Permit must be used for multiple positions (SHE-FRM-10-02).

SLINGING PLANS

11 During standard lifting operations, the following slinging plan shall be followed by the **Signaller/Slinger** as part of their duties :

- (a) Assess the weight of the load.
- (b) Choose the correct lifting equipment and control the lifting operation.
- (c) Ensuring lifting equipment is fit for use by carrying out pre-use checks.
- (d) Ensure that any physical controls ie. barriers are in place and nonessential personnel are kept out of the immediate working area of the operation.
- (e) Check the anticipated path of the load.
- (f) Prepare a place to set down the load.

- (g) Fit the lifting equipment to the load together with tag lines as necessary.
- (h) Make the lift (a trial lift may be necessary to establish centre of gravity).
- (i) Release the lifting equipment after the lift has been completed.

12 Clear up.

13 Where appropriate, return lifting equipment to a suitable secure storage location.

14 Be familiar with any appropriate communication arrangements, documentation or operational requirements such as risk assessments, method statements or Permit to Lifts.

2.3.10.4 Application of Procedures to Cranes under the Control of Contractors

1 When contractors provide cranes for their own use and operate them under their own control, then the principles of this procedure shall apply, however **COMPANY** will retain permit control.

2 These requirements shall be discussed at the initial safety meeting with contractors. It shall be agreed at that meeting:

- (a) When a method statement is required from the Contractor.
- (b) Who the Contractor has nominated as his competent Appointed Person.
- (c) The Contractor's **Appointed Person** shall prepare a Crane Lift Plan (it will be necessary for ourselves to provide details of the ground conditions). **COMPANY** shall complete the Permit to Lift Checklist and Permit to Lift.

SPECIAL OR COMPLEX LIFTS

3 Special lifts include Tandem, Complex, Floating Lifts etc. Additional advice must be sought from the SHE team during the planning of such lifting operations.

4 Where possible this should be arranged as a contract lift.

5 Certain crane applications, such as handling temporary pile casings or piling hammers/extractors can be controlled by a trained **Signaller/Slinger** provided that a detailed risk assessment/method statement has been produced by the Appointed Person, and it is worked to, and the **Signaller/Slinger** has been specifically instructed in its application.

6 Complex lifts may be common and repetitive during piling operation ie. Tandem Lifts, Diaphragm Walls, Topping and Tailing Loads etc. Where it has been identified by the Appointed Person that this is the case, the **Appointed Person** shall be in attendance for the duration of the first lift. Once satisfied the Lifting Operation, Risk Assessment and Method Statement are correct they may delegate their supervisory duties to the **Crane/Lift Supervisor** for the remainder of the operation. Thereafter the **Appointed Person** will be required to monitor the lifting operation at intervals agreed with the **Project Manager**. Where changes to lifting operation, Risk Assessment/Method Statement are required, the **Appointed Persons** must be notified immediately and shall review and revise the lifting operation, Risk Assessment/Method Statement for the duration of the lift. Once satisfied, the Appointed Person can once again delegate the supervisory duties back to the **Crane/Supervisor**.

TOWER CRANES

7 Due to the high risk nature of tower crane selection, erection, use, maintenance and dismantling operations, specialist advice must be sought.

8 The **Appointed Person** must ensure there is an appropriate plan/lifting schedule in place for lifting operations. A typical example of a tower crane lifting schedule is included in the Lifting Plan and Schedule (SHE-FRM-10-03).

9 Where more than two tower cranes are operating within the same radius zone automatic proximity warning devices must be fitted, ie. anti clash systems,

Part 2.3.10: The Safe use of Cranes & Other Lifting Appliances

10 Where tower cranes are operating, systems should be in place which take account of protestors, unauthorised entry, etc. Controls should include :

- (a) For internal cranes, first/base section of the mast, in the region of 4 m. high, or to the underside of the upper floor, can be covered with heavy gauge 50 mm. squared (maximum) weld mesh secured with either wire or zip ties (not welded). Access for the crane driver can be in the form of an outward opening lockable door, with a turnbuckle on the inside with key access from the outside. Keys can be held by the crane driver and the Slinger/Signallers for use in the event of an emergency. The gate is to remain closed at all times whilst the driver is up the crane.
- (b) For external cranes, a 2.4 m. high plywood hoarding with a security fan, independent of the crane, gated as above, with mesh viewing panels to give additional natural lighting to facilitate safe access/egress.
- (c) Where the building is progressed around the tower crane, 2 m. high double clipped demountable Heras type fencing to be placed around the floor aperture at each floor slab level as the building progresses.
- (d) Lockable access doors to the cab/jib installed and padlocked shut when the crane driver vacates the crane.

11 When the crane driver vacates the crane, the machine to be locked off, isolated and secured into free slew either from the cab or from the isolator situated at the base.

EMERGENCY ARRANGEMENTS

12 **COMPANY** must ensure that suitable arrangements are put in place for emergency situations (rescue from tower crane, crane failure etc). Any such arrangements shall be subject to liaison with emergency services and appropriate rescue practices carried out to test any agreed arrangements.

GENERAL RULES

13 A list of general rules for the use of cranes is included at Appendix 1 and shall be made known to persons involved in lifting operations

2.3.10.5 Guidance To This Procedure

MINIMUM TRAINING REQUIREMENTS

1 **Appointed Person** must hold training certification following attendance and successful completion of a recognised Appointed Persons (Lifting Operations) training course.

2 **Lift Supervisors** must have received suitable and sufficient training. **Slinger/Signaller** must have received suitable and sufficient training certification for Slinger/Signaller.

3 **Mobile or Tower Crane Operator** must have received suitable and sufficient training certification for crane operation.

4 **Pedestrian Operated Tower Crane Operator** must have received suitable and sufficient training certification for crane operation.

5 **Other Lifting Equipment**, operators must hold suitable training certification relevant to the category of lifting equipment being used.

6 Lifting Equipment and Accessories – Testing (see Appendix 2)

7 The implementation of LOLER and BS 7121 Part 2:2003: Code of Practice for Safe Use of Cranes - Inspection, Testing and Examination', provides the opportunity for either a "specified period" or an "examination scheme" approach to the 12 monthly thorough examination.

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- 8 If the examination scheme approach is to be used, the owner must produce a scheme in consultation with the manufacturer or another competent engineer.
- 9 Mobile cranes with a rated capacity of less than 500 tonne that are not thoroughly tested in accordance with an examination scheme should be load tested every 4 years.
- 10 Any lifting accessory found not to have a current test certificate should be taken out of service immediately and be quarantined and clearly marked for re-testing or disposal.

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APPENDIX 1 - GENERAL RULES FOR THE USE OF CRANES

1 The following rules apply to all **COMPANY** sites and shall be made known to all persons involved in lifting operations :

- (a) Cranes shall only be used for vertical lifts.
- (b) The weight of the load (including lifting gear, etc.) shall be confirmed before lifting.
- (c) A common lift schedule for tower cranes to be produced.
- (d) The safe working load shall never be exceeded; if the Rated Capacity Indicator is activated this shall be investigated.
- (e) When lifting a load for the first time the crane stability shall be checked when the load is just off the ground.
- (f) No operation shall be carried out where high winds affect the stability of the load or the crane. Limits on wind speeds shall be determined (i.e. by reference to the operator's manual). The means for determining wind speed shall be by use of an anemometer fitted to the crane or available on site.
- (g) An audible alarm shall be capable of being heard at the crane's maximum operation radius.
- (h) No crane shall be left unattended with the load suspended or the engine running.
- (i) The crane shall be left secured when unattended.
- (j) Persons shall only be lifted by a crane in power lowering mode and automatic brakes. Cranes with keys to set power lowering shall be locked in this mode and the key retained by the Appointed Person or Project/Site Manager whenever persons are to be lifted.
- (k) Crane Selection for Carriage of Persons: The following points are mandatory:
 - (i) Cranes with the "traditional manually operated slipping friction clutch will not be used
 - (ii) Cranes with hydraulically driven permanently engaged clutches are preferred.
 - (iii) Cranes must be used in a power load lowering mode. Cranes which have a free fall mode must be 'locked out' of free fall with a key operated selector and indications of this shown externally on the crane and within the cab, by light or sound. The keys must be held secure by the Project/Site Manager or other Appointed Persons whilst the crane is engaged in man riding duties.
 - (iv) The cranes must have automatic brakes which will be automatically applied if the hoisting lever is not in the operating position.
 - (v) Besides the automatic brake, there must be other means of arresting the load, i.e. by the hydraulic winch motor and a foot operated brake.
 - (vi) Cranes with latchable controls must have the latching mechanisms removed, ie. controls must automatically return to the neutral position when released.
 - (vii) Lifting equipment used shall comply with relevant Qatar Regulatory Document (Construction) together with the relevant British Standard.
 - (viii) Each crane must be individually assessed and a technical statement, with appropriate information, obtained from the owner as to its suitability for the carriage of persons. This statement must be appraised by a technically competent person and agreed prior to the commencement of man-riding.
 - (ix) Technical assistance is available from the SHE Manager/Team.
 - (x) Overhoist device shall be fitted for all man-riding operations or where an overhoist risk exists.
- (l) Cranes shall not slew within 600 mm. of any fixed object that may cause a trap.
- (m) Only trained and certificated Signaller/Slingers shall direct crane drivers. If more than one Signaller is appointed only one shall have authority to direct the Crane Driver and that Signaller shall be known to the Crane Driver.
- (n) Site conditions, both underfoot and overhead, shall be checked for hazards before a crane is used. This includes checking access to and egress from the site before attendance.

APPENDIX 2 - TABLE OF INSPECTION AND EXAMINATIONS

TYPE OF EQUIPMENT	INSPECTION REQUIREMENTS	PERIOD OF THOROUGH EXAMINATION
Mobile cranes and tower cranes	Daily pre-use checks and weekly inspection by trained operator.	12 monthly* by competent person (6 monthly if used for lifting persons)
Tower cranes	Daily pre-use checks and weekly inspection by trained operator.	As above and initial test and examination before use required
Lorry mounted cranes	Daily pre-use checks and weekly inspection by trained operator.	12 monthly by competent person
Excavator	Weekly inspection by trained driver.	12 monthly by competent person
Mobile elevating work platforms (MEWPs)	Daily pre-use checks and weekly inspection by trained operator.	6 monthly by competent person
Passenger and goods lifts	In accordance with the manufactures' instructions.	6 monthly by competent person
Scissors lifts (fixed)	Refer to manufacturers' instructions.	6 monthly by competent person
Tele-handlers (all terrain)	Daily pre-use checks and weekly inspection by trained operator.	12 monthly by competent person
Fork lift trucks	Weekly inspection by trained driver.	6 monthly competent person
Overhead cranes (motorised or manual)	In accordance with the manufactures' instructions.	12 monthly by competent person
Vehicle tail lifts, maintenance lifts	In accordance with the manufacturers' instructions.	12 monthly by competent person
Lifting chains, chain slings, spreader beams, lifting frames ring hooks, shackles, swivels, eyebolts, turnbuckles, wire ropes & slings, strops, fibre ropes, slings & all textile based slings.	Visually check for obvious defects in accordance with training / experience immediately prior to use.	6 Monthly by competent person.
Fixed lifting beams	Periodic visual inspection depending upon usage.	12 monthly by competent person
Hydraulic jacks and screw jacks	Periodic visual inspection depending upon usage.	12 monthly by competent person
Flood lighting winches	None.	12 monthly by competent person
Tie down straps for lorry loads.	Weekly visual inspection by trained driver.	Not required
Body harness	Visual inspection of all webbing stitching and attachments every month, and before use.	6 monthly by competent person

* Can be a specified examination scheme in lieu of the 12 monthly thorough examination for cranes.

Equipment such as pallet trucks, sack barrows and manhole cover lifters do not require a thorough examination under LOLER but shall be subject to regular visual inspections as required by the Provision and Use of Work Equipment - PUWER (refer to separate procedure and guidance).

2.3.10.6 Reference Documents

PROCEDURES

FORMS

- 1 Site/crane Permit to Lift Part 1 (SHE-FRM-10-01)
- 2 Site/Crane Permit to Lift Part 2 (Multiple Operations) (SHE-FRM-10-02)
- 3 Control of Lifting Operations - Lift Plan and Schedule (SHE-FRM-10-03)
- 4 Control of Lifting Operations – Pre-Permit to Lift Checklist (SHE-FRM-10-04)
- 5 Lifting Appliance Use for Loading (Tele Handler etc) (SHE-FRM-10-05)
- 6 Lorry Mounted Crane Checklist (Hiab) (SHE-FRM-10-06)

FURTHER REFERENCE

- 7 Lifting operations are properly planned and appropriately supervised. Detailed information on all these issues can be found in:
 - (a) Qatar Regulatory Document (Construction) RD1.3 and RD1.4
 - (b) BS 7121-1:2006 Code of practice for the safe of cranes – Part 1: General
 - (c) BS 7121-2:2003 Code of practice for the safe of cranes – Part 2: Inspection, testing and examination
 - (d) BS 7121-3:2000 Code of practice for the safe of cranes – Part 3: Mobile Cranes
 - (e) BS 7121-4:2010 Code of practice for the safe of cranes – Part 4: Lorry Loaders
 - (f) BS 7121-5:2006 Code of practice for the safe of cranes – Part 5: Tower Cranes
 - (g) Management of temporary works and equipment is covered in QCS Section 1, Part 14

2.3.10.7 Author

SECTION	NAME	POSITION IN COMPANY	CONTACT DETAILS
		SHE Manager	

2.3.10.8 Approvals

	NAME	POSITION IN COMPANY	SIGNATURE & DATE
Approved by:		SHEQ Director	

FORM SHE-FRM-10-04 CRANE/PERMIT TO LIFT CHECK LIST COMPLETED

YES ☐

Contract :				
Location : Task/Method Statement No. (If applicable):				
Appointed Person : Employed by:			Date and Time of Visit :	
Standard Lift <input type="checkbox"/>	Contract Lift <input type="checkbox"/>		Complex Lift <input type="checkbox"/>	
Single Crane Position <input type="checkbox"/> Complete Part 1 only			Multiple Crane Positions <input type="checkbox"/> Complete Parts 1 & 2	
Description of Works :				
LOAD DETAILS				
Max. Weight :			Max. Size of Load :	
Max. Radius :			Max. Lift Height :	
Others e.g. Unusual Centre of Gravity, Lifting Points etc. :				
CRANE DETAILS				
Capacity and Type :				
Max. Available Boom Length :			Max. Boom Length To Be Used For Lift :	
Counterweight Req :			Hook Block Reeving (No. of Falls) :	
Outrigger Spread (centre to centre) : m. x m.			Outrigger Pad Size (without mats) :	
Max. Outrigger Load:				
SITE SURFACE CONDITIONS				
Access for Crane :			Access for Transport :	
Lifting Position :			Laydown Area :	
Safe Ground Bearing Capacity Under Outrigger :			Assessed by :	
Proximity Hazards, provide details and attach sketch (eg overhead lines, public roads, drains, ground conditions etc) : A temporary works design for the lifting platform must be in place and signed off prior to setting up/commencing lifting operations. (Permit part 2 shall be completed for all crane positions/repositions of the crane.)				
CRANE ACCESSORIES REQUIRED (State type and safe working load)				
Wire ropes :			Chains :	
Web Slings :			Shackles :	
Beams :			Outrigger Mats (state size) :	
Others (including specialist equipment) :				
Operational Requirements e.g. road closures/possessions/site clearance :				
Permit Valid From To				
CRANE TEAM				
	Name	Qualifications	Signature	Date
Appointed Person		No. Expires:		
Crane Supervisors		No. Expires:		
Crane Operator		No. Expires:		
Signaller/Slinger		No. Expires:		

Where contractors are required to complete this form, assistance shall be given by **COMPANY** Authorised Person who shall agree the details entered on the form and sign below.

Lifting operations must not commence until this form has been signed by **COMPANY** Authorised Person.

Distribution: Site File ☐ Appointed Person ☐ Crane Supervisor ☐
Crane Operator ☐

Details agreed on behalf of **COMPANY**

Signature

Date

If for any reason the details contained within this permit cannot be adhered to, the lifting operation **must not** continue, the Appointed Person must be notified immediately.

ARRANGEMENTS FOR MULTIPLE CRANE POSITIONS

I agree that the crane described in part 1 may be re-positioned within the constraints defined within the Lift Plan provided that each time it is set up in a new position the items in the list below are checked and signed for by the Crane Supervisor. When the crane is being operated by a Contractor, each entry shall be countersigned by an **COMPANY** person, authorised by the Project Manager. The signature(s) shall be entered on this form prior to allowing the crane to operate in the new position.

.....
Appointed Person

.....
Date

This form shall remain in the crane cab during lifting operations and be returned to the **COMPANY** Project Manager on completion of the lifting operations as described in part 1.

Position Ref. as Lift Plan	Time	Date	Outriggers Extended to Spread Stated in Lift Plan	All Outriggers on Crane Platform and Within Designated Lifting Area Defined in Lift Plan	Mats as Defined in Lift Plan Correctly Placed Under Each Outrigger	Additional items to be inserted by AP, if required		Crane Lift Supervisor Signature	COMPANY Authorised Signature

LIFT PLAN AND SCHEDULE

*This Lift Plan is specific to the lifting operations described in the "Scope".
It is not and should never be considered "Generic"*

Contract:	
Date of Lifting Operation:	
Lift Plan Ref or Activity:	

Appointed Person Preparing this Lift Plan:			
Date:		Signed:	

Lift Supervisor:	
-------------------------	--

<u>Purpose</u>
<u>The purpose of this lifting plan is to identify the control measures necessary to negate the primary hazards of :</u>
<ol style="list-style-type: none"> <u>The crane overturning</u> <u>The load falling from the crane</u> <u>The load or machine striking someone or any other identified hazard</u>

<u>Scope of Works</u>

Details of Crane Hire Company			
<u>Company Name:</u>			
<u>Address:</u>			
<u>Contact Name:</u>		Telephone:	
Details of Crane Operator			
<u>Qualifications and Operating History:</u>			

Load Details			
Max Weight:		Max Size of Load:	
<i>Other Details (centre of gravity, lifting points, packaging, pallets etc):</i>			

Details of Crane	
Capacity and Type:	
Height (Ground – Jib Head):	
Radius:	
Main Jib Length:	
Fly Jib Length:	
Total Jib Length:	
Safe Working Load:	
Actual Working Load:	
Out Rigger Spread:	
Counterbalance Weight:	
Ground Conditions (CBR, Strata), Temporary Works Design in Place and Checked Off (where appropriate) :	
Out Rigger Loadings:	
Spread Mat Requirements:	
<i>Note: Where operating (Jib) height equals or exceeds 10m at any time, the Appointed Person must advise and consult with the Manager from any airport/airfield with 6km of the site.</i>	
Airport/Airfield Requirements:	

Lifting Accessories & Configuration	
<u>Equipment Details:</u>	
<u>Type (e.g. spreader beam):</u>	
<u>Safe Working Load:</u>	<u>(Note: will configuration affect SWL?)</u>
<u>Sketch of Slings Method:</u>	

Site Conditions and Hazards

The following non-exhaustive list should be considered during the lift plan along with any other factors which could affect any aspect of the lift.

Excavations, embankments, overhead and underground services or obstructions, culverts, drainage, manhole/inspection chambers, buildings, stationary objects, scaffolding, plant and equipment, roads, rivers, railways, personnel and public, other cranes, environmental considerations.

Hazard

Control

Strength and Stability

Ground conditions must be suitable and sufficient and remain so during crane lifts to take the anticipated loads. Include details of the ground conditions and any additional works required to the ground, including spreader mats specification and any testing regime required e.g. CBR tests.

A temporary works design must be in place and checked off before any lifting operation or crane set up takes place.

Weather / Environmental Considerations

Indicate in this section detail of wind speeds / environmental conditions that have been referenced / anticipated for the duration of the lifting operations.

Access

Include any special travelling routes, road closures / highways notifications, access problems.

Third Party Considerations

Over-sailing, works adjacent to railways, noise and restriction of view.

Emergency / Breakdown Procedures

Signalling

Indicate whether hand signals or radios are to be used. Also indicate signalling source and radio frequency/channel. This section can also include any unique slinger/signaller identification (i.e. different colour helmet / hi-vis) if required.

Site and Crane Layout Plan

Include crane position, lay-down / rigging area, position of delivery vehicles, landing points, banksman positions, ground and overhead hazards and exclusion zones. If required use elevation drawings.

Safe System of Work - Methodology

Include pre-lift, lift and post lift.

Lift Team			
The details of this Lift Plan along with any other associated Risk Assessment, Method Statement or Safe System of Work have been brought to the attention and explained to the persons listed below who have acknowledged that they understand the contents, hazards and associated control measures.			
Other Relevant Documentation (<i>list and attach</i>)			
Position	Name	Signature	Date
Site/Project Manager:			
Lift Supervisor:			
Crane Operator:			
Slinger / Signaller:			
Others:			

This plan is specific to the lift as detailed in the scope of works.

In the event of any changes to circumstances, personnel or equipment, the plan should be reviewed and revised by the Appointed Person and any changes re-communicated to the lift team.

SCHEDULE OF LIFTS (Common Lifts) :

Item to be Lifted	Max Weight	Crane Used	Lifted From	Lifted To	Lifting Accessories Used	SWL	Comments
<i>Pallets of Bricks/blocks</i>	<i>2 tonne</i>	<i>tower</i>	<i>Lorry or store</i>	<i>Loading platform</i>	<i>Forks & netting</i>	<i>2.5 Tonne</i>	<i>Forks must be slid fully home and netting wrapped around load after having lifted the pack approx 300mm from original position.</i>
<i>Concrete skip</i>	<i>2 tonne</i>	<i>tower</i>	<i>RMC truck</i>	<i>pour</i>	<i>Drop chain</i>	<i>3 Tonne</i>	<i>Drop chain only to be used, not longer chains hooked back up to main lifting ring</i>

This checklist must be completed fully before the permit to lift is issued.

Contract:	
Date of Lifting Operation:	
Lift Plan Ref or Activity:	

No.	Check	Yes	No
1	Has a Lift Plan been produced by an Appointed Person and accepted by COMPANY ?		
2	Has the correct crane, as stated in the Lift Plan, been supplied, complete with manufacturer's operating manual including a maintenance inspection checklist and duty charts?		
3	Is a current report of last thorough examination of the crane (within the last 12 months or 6 months in the case of man-riding operations) available?		
4	Are current 6 monthly test/thorough examination certificates for all lifting equipment / accessories available on site and their 'ID' numbers checked.		
5	Have all maintenance inspections, including last daily / weekly checks been carried out and recorded, and evidence of PPM scheme available? Last recorded entry in register:		
6	Is the Crane Driver's training certification available and current for the category of crane being operated? (Check that the Driver has experience of this type of crane or operation e.g. grabbing or balling operations.)		
7	Is the Banksman/Slinger's certificate of training / competence available and current?		
8	Has the Crane / Lift Supervisor been appointed?		
9	Is the crane sited in the position identified in the Lift Plan?		
10	Have all risks from obstructions, such as foul sewer and surface water drain manholes, overhead cables or adjacent structures, been identified and suitable precautions implemented?		
11	Are the lifting accessories suitable for the task and as identified within the Lift Plan, is there safe access to sling the load and will the load(s) be stable while being slung / unloaded and are any lifting points on the load identified and correct?		
12	Has the 'Crane Lift Team' (and others that may be affected) been made aware of the requirements in the Lift Plan, received an induction, and signed acknowledgement of the content of the Plan and the operations associated control measures?		

A complete copy of the Lifting Plan and associated crane documentation must be retained in the site safety file and be ready for inspection at any time.

If the answer to any of the above questions is 'NO', the Permit to Lift must not be issued until the query has been resolved.

Site / Project Manager Completing this Checklist:			
Date:		Signature:	

Operator's Confirmation

I have carried out all statutory and maintenance inspections as detailed above.

Operator's Details

Name (print): _____

Signature: _____

Crane Type: _____

Qualifications: _____

Registration No : _____ Date: _____

Distribution : Crane Operator ☐ Site File ☐

DELIVERIES			
Type of Plant/Equipment:		Vehicle Registration Number (as applicable):	
Project Name:			
Supplier:		Driver Name:	
Delivery For:		Date:	

CHECKLIST		
	Yes	No
1. Is the driver's qualifications correct for the required task?	<input type="checkbox"/>	<input type="checkbox"/>
2. Is a current 12 month certificate of thorough examination in place for the Appliance?	<input type="checkbox"/>	<input type="checkbox"/>
3. Is the common Lift Plan in place?	<input type="checkbox"/>	<input type="checkbox"/>
4. Are certificates in place for lifting accessories?	<input type="checkbox"/>	<input type="checkbox"/>
5. Does the driver understand the requirement to have assistance loading/unloading transport vehicles?	<input type="checkbox"/>	<input type="checkbox"/>
Location:		

Defects Found:			
Comments:			
Signature:		Date:	
On completion file.			

DELIVERIES			
Type of Plant/Equipment:	LORRY MOUNTED CRANE (HIAB)	Vehicle Registration Number:	
Project Name:			
Supplier:		Driver Name:	
Delivery for:		Date:	

CHECKLIST		
	Yes	No
1. Is the driver's qualifications correct for the required task?	<input type="checkbox"/>	<input type="checkbox"/>
2. Is a current 12 month certificate of thorough examination in place for the 'HIAB'?	<input type="checkbox"/>	<input type="checkbox"/>
3. Is the common lifting plan in place?	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the above include the operation in hand?	<input type="checkbox"/>	<input type="checkbox"/>
5. Does the driver understand that a lift must not take place if they are beneath the load, is this identified in the plan (Item 3)?	<input type="checkbox"/>	<input type="checkbox"/>
6. Does the driver understand the ' No Lone ' working rule relative to the loading and unloading of the wagon?	<input type="checkbox"/>	<input type="checkbox"/>
Location:		

Defects found:			
Comments:			
Signature:		Date:	
On completion file.			