



LIFTING OPERATIONS LIFTING EQUIPMENT MANAGEMENT

IRF (International Regulators Forum) – Maintenance of lifting equipment
(Template MAINT 5 only. Templates MAINT1 to 4 included in CRANE MAINTENANCE SYSTEM PROMPT SHEET)

OPERATOR:
FACILITY / LOCATION:
INSPECTION DATE:

No	Prompt	Remarks	Comments /Status
1	Procedure		<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
			Tick one (√)
1.1	Is there a lifting equipment management (use and maintenance) procedure?	Lifting devices (see legend below) often have their own dedicated management system (e.g. cranes)	
1.2	Is there a requirement for the creation and maintenance of a lifting/lifted equipment register?	Is the format and content of the lifting equipment register defined?	
1.3	Does the procedure define the competencies, authority and responsibility of persons involved in the management of lifting/lifted equipment?	Including maintenance and inspection.	
1.4	Does the procedure define which inspection and testing tasks will be performed in-house (using own personnel), which will be conducted using external (independent) inspection and testing agencies?		



LIFTING OPERATIONS LIFTING EQUIPMENT MANAGEMENT

No	Prompt	Remarks	Comments /Status
1.5	How lifting equipment documentation is managed?	What records are kept and where?, E.g. <ul style="list-style-type: none">• Design certificates• MDRs (Manufacturer Data Records)• Inspection/test certificates.	
1.6	What provisions apply to contractor and transit lifting gear?		
1.8	Does the procedure determine what markings are required on each type of lifting equipment?	See lifting equipment register below.	
1.9	Does the procedure clearly state "NO MARKINGS NO LIFT" principle?		
1.10	Does the procedure define the frequency and extent of inspection and testing for each type of lifting equipment?	See inspection and testing guide below.	
1.11	Is there a system for ensuring that each item of lifting gear (including pad eyes) is regularly inspected and tested?	This is often done under a Colour Code System	
1.12	Is there a scope and workings of the colour scheme defined?		



LIFTING OPERATIONS LIFTING EQUIPMENT MANAGEMENT

No	Prompt	Remarks	Comments /Status
1.13	How is defective lifting equipment treated?	Is it clear which equipment - if found to be defective - is removed/destroyed (e.g. wire slings), which is repaired (e.g. chain blocks)? Is this covered by a written instruction setting acceptance/rejection criteria?	
1.14	Is lifting equipment management/procedure regularly monitored, audited and reviewed?	Who, what, when?	
2	Personnel		<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
			Tick one (✓)
2.1	Is there a system for ensuring competency of personnel involved in: <ul style="list-style-type: none"> • Management • Use, • Inspection and testing of lifting equipment? 	<p>This should cover:</p> <ul style="list-style-type: none"> • company personnel • independent inspection and testing personnel; and • third party (contractor) personnel. • I there a system for ensuring competency of personnel inspecting/testing lifting equipment (are there any provisions for providing personnel with specialist (e.g. inspection) training)? <p>See "Crane driver and dogman competency prompt sheet" for further guidance if necessary</p>	



LIFTING OPERATIONS LIFTING EQUIPMENT MANAGEMENT

No	Prompt	Remarks	Comments /Status
2.2	Are personnel training and assessment (incl. certification) records available?	Are they up to date?	
3	Lifting equipment register		<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Tick one (✓)
3.1	Is the lifting equipment register kept up to date?		
3.2	Check coverage of the register for (see chart below): <ul style="list-style-type: none"> • Lifting devices (cranes, winches, chain bloks, monorails, padeyes etc.) • Lifted equipment/devices (containers, beams, baskets) • Rigging gear (ropes, slings, chains, shackles, clamps) 	Cranes and monorails might be covered by the maintenance system (See crane maintenance checklist)	
3.3	Check for the information contained in the register: <ul style="list-style-type: none"> • Unique ID number • Detail description of equipment (individual items) • SWL or WLL • Serial and batch numbers (wher applicable), • Location on the facility • Certificate (of initial test or when purchased) • Inspection an subsequent test certificates 	SWL- Safe Working Load WLL –Working Load Limit Serial and Batch numbers not unique Identification Number normally used for mass produced items (e.g shackles). Certificates are often cross referenced in the lifting equipment register to folders where they are kept.	



LIFTING OPERATIONS LIFTING EQUIPMENT MANAGEMENT

No	Prompt	Remarks	Comments /Status
4	Condition of lifting equipment		<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
	IRF MAINT 5 (Maintenance of lifting accessories)		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.1	Is the lifting equipment inspected as per procedure?	Examine condition of a sample of lifting equipment: <ul style="list-style-type: none"> Is it in good condition? Is it free from obvious visual defects? 	IRF MAINT 5
4.2	Is portable lifting gear properly stored, in good condition etc?	<ul style="list-style-type: none"> Is lifting gear stored in such a way that would prevent any damage to the equipment? What arrangements are in place for issuing and returning lifting gear? Is condition of lifting gear checked prior to issue/use? By whom? When lifting gear was last thoroughly inspected (check for colour coding)? Check if there is other lifting gear (e.g. incoming cargo slings) not part of the facility system and how is it controlled. 	IRF MAINT 5



LIFTING OPERATIONS LIFTING EQUIPMENT MANAGEMENT

No	Prompt	Remarks	Comments /Status
5. Lifting equipment inspection and testing (guide only)			
5.1	Cranes – independent load test	<ul style="list-style-type: none">Initial load test (when installed),Following major repairs or overhaul (e.g. replacement of brake lining),Every four years (usual class requirement).	
5.2	Cranes – independent survey (visual)	<ul style="list-style-type: none">Visual inspection every 12 months (often includes NDT of some load bearing components – as per manufacturer or company program),Special NDT requirements may apply (e.g. every 12 months for every load bearing component) if crane used for lifting personnel.	
5.3	Cranes – by crane operators	<ul style="list-style-type: none">Daily (before use) and weekly visual inspection and checks by the crane driver as per manufacturer's spec. or company program. These checks should be recorded (crane log book required in WA state jurisdiction)	



LIFTING OPERATIONS LIFTING EQUIPMENT MANAGEMENT

No	Prompt	Remarks	Comments /Status
5.4	Pad eyes – independent load test	<ul style="list-style-type: none"> Initial load test when built (installed), Following major (structural) repair. 	
5.5	Pad eyes – independent survey	<ul style="list-style-type: none"> Visual every 12 months NDT as per company program (e.g. every 12 months if frequently used and high reliability required). 	
5.6	Pad eyes – by users	<ul style="list-style-type: none"> Visual check before every use (including check for markings). 	
5.7	Monorails – load test and independent surveys	Similar to pad eyes	
5.8	Winches – independent load tests and surveys.	Similar to cranes.	
5.9	Winches – by users	<ul style="list-style-type: none"> Visual check before every use (including functional test). 	
5.10	Manriding winches and associated gear (e.g. sheave shafts, hooks, winch anchor bolts)	<p>In addition to all tests for winches:</p> <ul style="list-style-type: none"> Visual inspection and NDT every 12 months of each component (including gears, shafts, shaft keys etc) a failure of which may result in a person being dropped from height. 	



LIFTING OPERATIONS LIFTING EQUIPMENT MANAGEMENT

No	Prompt	Remarks	Comments /Status
5.11	Lifted equipment – independent load test	<ul style="list-style-type: none">Initial load test (when new),Following major structural repairs or alterations.Every 6 years (at the discretion of the inspection /classification body).	
5.12	Lifted equipment - NDT	<ul style="list-style-type: none">Initial when newEvery 3 years thereafterFollowing major (structural) repairs	
5.13	Lifted equipment – by users	<ul style="list-style-type: none">Visual check before use.	
5.14	Personal transfer basket (Billy Pugh etc.) – independent load test	<ul style="list-style-type: none">Yearly (or as per manufacturer's requirements)	
5.15	Rigging (slings) - independent load test.	<ul style="list-style-type: none">Wire slings -initial load test, then on requestChain slings – when new	
5.16	Rigging gear – general visual	<ul style="list-style-type: none">By users before every useEvery 3- 6 months (under colour scheme), more thorough inspection by a suitably trained person. Scope of those inspections should be defined.	



LIFTING OPERATIONS LIFTING EQUIPMENT MANAGEMENT

No	Prompt	Remarks	Comments /Status
5.17	Hooks	<ul style="list-style-type: none">• Initial load test when new,• Visual inspection; before use and yearly more thorough inspection by a suitably trained person (could be also inspected 3-6 monthly under colour code scheme)• NDT inspection every 2 years	
5.18	Shackles, swivels	<ul style="list-style-type: none">• Initial load test when new,• Visual inspection; before use and 3-6 monthly under colour code scheme by a suitably trained person.• NDT inspection per company program (depending on application – e.g. yearly if used for personnel lifting, every 3 years if used with containers).	
5.19	Containers, skips, lifting beams, spreader beams and frames.	<ul style="list-style-type: none">• Initial load test when new• NDT structure 6 years, pad eyes 3 years.• Visual inspection before use and yearly thorough inspection by a suitably trained person.	



LIFTING OPERATIONS LIFTING EQUIPMENT MANAGEMENT

No	Prompt	Remarks	Comments /Status
5.20	Sheave blocks	<ul style="list-style-type: none"> Initial load test when new Visual before use and 3-6 months (under colour scheme) Additional load test or/and NDT per company program depending on use. 	

LEGEND:

- non compliance (major failing)
 - partially complies (incomplete system)
 - complies
 - not evaluated

Notes:

- Scores should be entered in both NOPSA (round) and IRF (square) traffic lights.
- When allocating traffic light scores for IRF elements only the IRF element marked questions e.g. IRF MAINT 5 should be considered. All questions in each section - including IRF marked - should be considered when allocating NOPSA traffic light scores.
- In the "Comments/Status" column the following information should be entered, where appropriate:
 - Description of non-compliance(s)
 - Any general or specific comments relating to identified compliance and non-compliance issues
 - Action taken by the OHS inspector
 - Description of identified good practice(s).
- The Schedule of Specific Requirements as to Offshore Petroleum Exploration and Production 1996 (PSLA Schedule), Part 7- Cranes, applies to Western Australian designated and inland waters (also known as State Waters).



**LIFTING OPERATIONS
LIFTING EQUIPMENT MANAGEMENT**

(Please send the completed prompt sheets to T3 EA with 3 good practices and 3 practices with deficiencies/major failures)

INSPECTION CARRIED OUT BY

Name:

Signature:.....



LIFTING OPERATIONS
LIFTING EQUIPMENT MANAGEMENT

