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SCHNEIDER ELECTRIC				Procedure Number: SE415			
North America				PAGE: 1 of 13			
Safety & Environmental Policy				DATE EFFECTIVE: 9-1-2012			
NAME: CRANES & HOISTS				SUPERSEDES:			
PURPOSE: The purpose of this procedure is to assure that cranes and hoists are installed, used and maintained in accordance with applicable codes, regulations and generally accepted safety practices.				Reference Regulatory: None			
				Reference Mgt. System:			
Issued by: Stan McAlister Director, Safety and Environmental SENA				Approved by: Rich Widdowson VP GSC Global Safety & SERE NA			
Review Date:							

Attachments

Sample - [Att A](#) Monthly Audits

Required- [Att B](#) Critical Lifts

1) Scope

Schneider Electric's policy is to maintain a safe workplace for its employees; therefore, it cannot be overemphasized that only qualified and licensed individuals shall operate these devices. The safety rules and guidance in this procedure apply to all operations at Schneider Electric North America that involve the use of cranes and hoists installed in or attached to buildings and to all Schneider Electric employees, supplemental labor, and subcontractor personnel who use such devices.

2) References

- a. ASME/ANSI B30.2, "Overhead and Gantry Cranes (Top Running Bridge, Single or Multiple Girder, Top Running Trolley Hoist).
- b. ASME/ANSI B30.9, "Slings"
- c. ASME/ANSI B30.10, "Hooks"
- d. ASME/ANSI B30.11, "Monorails and Underhung Cranes."
- e. ASME/ANSI B30.16, "Overhead Hoists (Underhung)."
- f. ASME/ANSI B30.17, "Overhead and Gantry Cranes (Top Running Bridge, Single Girder, Underhung Hoist)."
- g. ASME/ANSI B30.20, "Below-the-Hook Lifting Devices."
- h. ASME/ANSI B30 Standards SME/ANSI B30.21, "Manually Lever Operated Hoists."
- i. SE160 Annual Training Plan
- j. Refer to your federal, provincial, state and local authorities for applicable Crane and Hoist standards.
- k. Facilities shall maintain procedures for the following;
 - a. Sample Attachment SE415A

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3) Definitions

- a) **Rigging** – The act of preparing a load to be lifted and/or a generic term used to describe the equipment and materials that are attached to the load to allow it to be lifted.
- b) **Spotter** – An employee responsible for assuring a clear path of travel for cranes and hoists, while staying close to the load being moved.
- c) **Crane Overloading** – Occurs when one attempts to lift a load beyond the stated weight capacity of the lifting device.
- d) **Suspended Load** – Occurs when the full weight of the load is lifted off the ground by the equipment or lifting device.

4) Communication and Responsibility

a) Supervisors or their Designees are responsible for:

- i) Ensuring that training is provided for prospective crane and hoist operators. This training shall be conducted by a qualified, experienced operator/instructor, selected by management.
- ii) Ensuring that all designated personal are trained and qualified to use the crane or hoist. The training shall be conducted by a qualified, experienced operator/instructor, selected by management.
- iii) Ensuring that hoisting equipment is inspected and tested monthly by a responsible individual and that rigging equipment is inspected annually or more frequently as required by the manufacturer's recommendations.

b) Crane and Hoist Operators are responsible for:

- i) Operating hoisting equipment safely.
- ii) Conducting functional and safety tests and inspections prior to using the equipment.
- iii) Selecting and using rigging equipment appropriately.
- iv) The operator shall complete a daily checklist per shift. The record shall be kept on or near the inspected crane and hoist and made available upon request for review and verification.

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c) Engineering, Maintenance, Facilities or designee is responsible for:

- i) Assuring that maintenance and inspection of all Schneider Electric cranes and hoists are performed as recommended by the manufacturer and/or necessary due to use.
- ii) Conducting periodic and special load tests of cranes and hoists as recommended by the manufacture and/or a factory authorized service company
- iii) Maintaining written records of inspections and tests. Results of these inspections shall be documented. The most recent (previous and current) reports shall be maintained and archived by Schneider Electric, and be readily accessible for review by company personnel and/or external agencies as required by regulation.
- iv) Inspecting and load testing cranes and hoists following modification or extensive repairs (e.g., a replaced cable or hook, or structural modification.) Load testing shall be performed by or under the direct supervision of a factory authorized service company.
- v) Scheduling a non-destructive test and inspection for crane and hoist hooks at the time of the periodic load test, and testing and inspecting before using new replacement hooks and other hooks suspected of having been overloaded. The evaluation, inspection, and testing may include, but are not limited to visual, dye penetrant, and magnetic particle techniques referenced in ASME B30.10 (Hooks, Inspection and Testing).
- vi) Maintaining all manuals for cranes and hoists in a central file for reference.
- vii) Managing the location's "Critical Lift Program" (Attachment B).

d) The Safety and Environmental representative is responsible for

- i) Ensuring that training for all Crane & Hoist Operators is conducted by a qualified experienced instructor, selected by management.
- ii) Periodically verifying monthly test and inspection reports.
- iii) Interpreting crane and hoist safety rules and standards.
- iv) Coordinating, facilitating or performing annual training on Cranes and Hoists as part of the Safety and Environmental training plan refer to SE160.

5) PROCEDURE

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All workers who utilize cranes or hoists shall undergo training on how to operate and inspect the equipment as a part of their normal training procedures when hired or moved to a job requiring crane and hoist use. Lifting of personnel with lifting equipment not designed, purchased and qualified for this purpose is strictly prohibited.

a) Crane and Hoist Safety Design Requirements

Following are the design requirements for cranes and hoists and their components:

- i) The design of all cranes and hoists shall comply with the requirements of ASME/ANSI B30 Standards.
- ii) Schneider Electric shall not fabricate any below the hook attachments. Modification of existing lifting equipment by Schneider Electric employees to lift personnel is strictly prohibited.
- iii) In case of re-commissioning due to repairing, modification or transfer, the conformity of design shall be completed by the supplier or manufacturer of the lifting device with certification as "Safe for use as installed".
- iv) Safety cables shall be applied to all hoist with suspended tools that meet the following conditions:
 - a. Lifting capacity of 2000lbs or less
 - b. Used for any purpose 50 or more times per eight hour period
- v) All crane and hoist hooks shall have safety latches.
- v) Hooks shall not be painted (or re-painted) if the paint previously applied by the manufacturer is worn.
- vi) Crane pendants shall have an electrical disconnect switch or button to open the main-line control circuit.
- vii) Cranes and hoists shall have a main electrical disconnect switch. This switch shall be in a separate box that is labeled with lockout capability.
- viii) Crane and hoists shall be labeled listing the maximum capacity.
- ix) A device such as an upper-limit switch or slip clutch shall be installed on all building cranes and hoists. A lower-limit switch may be required when there is insufficient hoist rope on the drum to reach the lowest point.
- x) All remotely operated bridge cranes shall have a motion alarm to signal bridge movement. As an alternative to having a motion alarm, a spotter along with the operator shall be within 10ft of the load traveling at a maximum speed of 2mph.

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- xi) All newly installed cranes and hoists, or those that have been extensively repaired or rebuilt structurally, shall be load tested per the manufacturers recommendations at 125% capacity prior to being placed into service.
- xii) If an overload device is installed, a load test to the adjusted setting is required.
- xiv) Personnel baskets and platforms suspended from any crane shall be designed in accordance with the federal, provincial, state or local governing authorities and purchased from the OEM of the crane and hoist or an authorized aftermarket provider.
- xv) Work Area Design:
 - a. The layout of the workshop shall take into account the area where the lifted load may be present.
 - b. Signage present shall be clear to all that lifting dangers are present in the work area.
 - c. The work area shall be designed to prevent inadvertent contact with equipment, property and personnel.

b) General Safety Rules

Operators shall comply with the following rules while operating the cranes and hoists:

- i) Do not engage in any practice that will divert your attention while operating the crane.
- ii) If applicable, respond to signals only from the person who is directing the lift or any appointed signal person. Obey a stop signal at all times, no matter who gives it.
- iii) Do not move a load over people. People shall not be placed in jeopardy by being under a suspended load. Also, do not work under a suspended load unless the load is supported by blocks, jacks, or a solid footing that will safely support the entire weight. Have a crane or hoist operator remain at the controls or lock open and tag the main electrical disconnect switch.
- iv) Ensure that the rated load capacity of a crane's bridge, individual hoist, or any sling or fitting is not exceeded. Know the weight of the object being lifted or use a dynamometer or load cell to determine the weight.
- v) Check that all controls are in the OFF position before closing the main-line disconnect switch.

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- vi) If spring-loaded reels are provided to lift pendants clear off the work area, ease the pendant up into the stop to prevent damaging the wire.
- vii) Avoid side pulls. These can cause the hoist rope to slip out of the drum groove, damaging the rope or destabilizing the crane or hoist.
- viii) To prevent shock loading, avoid sudden stops or starts. Shock loading can occur when a suspended load is accelerated or decelerated, and can overload the crane or hoist. When completing an upward or downward motion, ease the load slowly to a stop.

c) Operation Rules

i) Pre-operational Test

At the start of each work shift, operators shall do the following steps before making lifts with any crane or hoist:

1. Test the upper-limit switch. Slowly raise the unloaded hook block until the limit switch trips.
2. Visually inspect the hook, load lines, trolley, bridge and any rigging to be used as much as possible from the operator's station; in most instances, this will be the floor of the building. Note: Take any equipment, including rigging that does not meet minimum safety standards, out of service and tag for repair and/or disposal.
3. If provided, test the lower-limit switch.
4. Test all direction and speed controls for both bridge and trolley travel.
5. Test all bridge and trolley limit switches, where provided, if operation will bring the equipment in close proximity to the limit switches.
6. Test the pendant emergency stop.
7. Test the hoist brake to verify there is no drift without a load.
8. If provided, test the bridge movement alarm.
9. Lock out and tag for repair any crane or hoist that fails any of the above tests.

Note: The area supervisor or designate must document and ensure that a file is maintained. Records should be kept for the current and previous quarter.

ii) Moving a Load

1. Center the hook over the load to keep the cables from slipping out of the drum grooves and overlapping, and to prevent the load from swinging when it is lifted. Inspect the drum to verify that the cable is in the grooves.
2. Use a tag line when loads must traverse long distances or must otherwise be controlled. Manila rope may be used for tag lines.
3. Plan and check the travel path to avoid personnel and obstructions.
4. Lift the load only high enough to clear the tallest obstruction in the travel path.
5. Start and stop slowly.
6. Land the load when the move is finished. Choose a safe landing.
7. The swaying or swinging of a suspended load shall be prevented by the use of a guide rope or strap designed for this purpose. The suspended load shall not be stabilized by an operator placing their hand directly on the load.
8. Never leave suspended loads unattended. In an emergency where the crane or hoist has become inoperative, if a load must be left suspended, barricade and post signs in the surrounding area, under the load, and on all four sides. Lock open and tag the crane or hoist's main electrical disconnect switch.

iii) Parking a Crane or Hoist

1. Remove all slings and accessories from the hook. Return the rigging device to the designated storage racks.
2. Raise the hook at least 2.1 m (7-ft) above the floor or park the crane or hoist in a place which will not interfere with passing traffic. Store the pendant away from aisles and work areas, or raise it at least 2.1m (7ft) above the floor.
3. If applicable place the emergency stop switch (or push button) in the OFF position.

d) Rigging

i) General Rigging Safety Requirements

Select only rigging equipment that is in good condition. All rigging equipment shall be inspected off-line by a competent technician at least annually. Defective equipment is to be removed from service and destroyed to prevent inadvertent reuse. The load capacity limits shall be stamped or affixed to all rigging components.

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Schneider Electric policy requires a minimum safety factor of 5 to be maintained for wire rope slings.

The following types of slings shall be rejected or destroyed:

1. Nylon slings with
 - a. Abnormal wear
 - b. Torn stitching
 - c. Broken or cut fibers
 - d. Discoloration or deterioration.
 - e. Visible indicator wear strip if so equipped.
2. Wire-rope slings with
 - a. Kinking, crushing, bird caging, or other distortions
 - b. Evidence of heat damage
 - c. Cracks, deformation, or worn end attachments
 - d. Six randomly broken wires in a single rope lay
 - e. Three broken wires in one strand of rope
 - f. Hooks opened more than 15% at the throat
 - g. Hooks twisted sideways more than 10degrees from the plane of the unbent hook
3. Alloy steel chain slings with
 - a. Cracked, bent, or elongated links or components
 - b. Cracked hooks
 - c. Shackles, eye bolts, turnbuckles, or other components that are damaged or deformed.

ii) Rigging a Load

Do the following when rigging a load:

1. Check the devices used in lifting, to determine the lifting capacity (nominal load).
2. Determine the weight of the load. Do not guess
3. The nominal weight labeled on the sling, chain, etc.. shall never be exceeded. Note that the minimum loading ratings for attachments is based on a designed angle once the load is attached. The load rating must be reduced as required when any lift other than a vertical lift directly perpendicular to the hoist is planned.
4. Determine the proper size for slings and components
5. Do not use manila rope for rigging
6. Make sure that shackle pins and shouldered eyebolts are installed in accordance with the manufacturer's recommendation

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7. Make sure that ordinary (shoulder less) eyebolts are threaded in at least 1.5 times the bolt diameter.
8. Use safety hoist rings (swivel eyes) as a preferred substitute for eye bolts wherever possible.
9. Pad sharp edges to protect slings. Remember that machinery foundations or angle-iron edges may not feel sharp to the touch but could cut into rigging when under several tons of load. Wood, tire rubber, or other pliable materials may be suitable for padding.
10. Do not use slings, eyebolts, shackles, or hooks that have been cut, welded, or brazed.
11. Install wire-rope clips with the base only on the live end and the U-bolt only on the dead end. Follow the manufacturer's recommendations for the spacing for each specific wire size.
12. Determine the center of gravity and balance the load before moving it.
13. Initially lift the load only a few inches to test the rigging and balance.

e) Crane Overloading

Cranes or hoists shall not be loaded beyond their rated capacity for normal operations. Any crane or hoist suspected of having been overloaded shall be removed from service by locking open and tagging the main disconnect switch. Additionally, overloaded cranes shall be inspected, repaired, load tested, and approved by a factory authorized service company before being returned to service.

f) Working at Heights on Cranes or Hoists

Anyone conducting maintenance or repair on cranes or hoists at heights greater than 1.2m or 4ft shall use fall protection. Fall protection should also be considered for heights less than 12m or 4 ft. Fall protection includes safety harnesses that are fitted with a lifeline and securely attached to a structural member of the crane or building or properly secured safety nets.

Use of a crane as a work platform should only be considered when conventional means of reaching an elevated worksite are hazardous or not possible. Workers shall not ride a moving bridge crane without an approval from the Safety & Environmental Department, which shall specify the following as a minimum:

- i) Personnel shall not board any bridge crane unless the main disconnect switch is locked and tagged open.
- ii) Personnel shall not use bridge cranes without a permanent platform (catwalk) as a work platform. Bridge catwalks shall have a permanent ladder access.

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- iii) Personnel shall ride seated on the floor of a permanent platform with approved safety handrails, wear safety harnesses attached to designated anchors, and be in clear view of the crane operator at all times.
- iv) Operators shall lock and tag open the main (or power) disconnect switch on the bridge catwalk when the crane is parked.

g) Inspection, Maintenance, and Testing

All tests and inspections shall be conducted in accordance with the manufacturer's recommendations. Results of these inspections shall be documented.

i) Daily and Monthly Inspections

1. The operator shall complete a daily check of the crane, hoist and attachments/rigging once per shift before the initial use of the crane or hoist.. This record is kept on, at or near the actual crane or hoist in use for immediate reference
2. Any corrective action or unsafe conditions should be reported to the Supervisor immediately such that the Lockout Tagout process can be initiated when applicable. See procedure SE460.
3. All in-service cranes and hoists shall be inspected monthly and the results documented on the attached or similar Inspection Form Attachment A.
4. Defective cranes and hoists shall be locked and tagged "out of service" until all defects are corrected. The inspector shall initiate corrective action by notifying the appropriate personnel.

ii) Annual Inspections

The Maintenance Facility or Engineering Supervisor shall schedule and supervise (or perform if qualified through external third-party certification) annual preventive maintenance (PM) and annual inspections of all cranes and hoists. The annual PM and inspection shall cover:

1. Hoisting and lowering mechanisms
2. Trolley travel or monorail travel
3. Bridge travel
4. Limit switches and locking and safety devices
5. Structural members
6. Bolts or rivets
7. Sheaves and drums

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8. Parts such as pins, bearings, shafts, gears, rollers, locking devices, and clamping devices
9. Brake system parts, linings, pawls, and ratchets
10. Load, wind, and other indicators over their full range
11. Gasoline, diesel, electric, or other power plants
12. Chain-drive sprockets
13. Crane and hoist hooks
14. Electrical apparatus such as controller contractors, limit switches, and push button stations
15. Wire rope
16. Hoist chains
17. Below-the-hook attachments and safety cables

iii) Load Testing

1. Newly installed cranes and hoists shall be load tested at 125% of the rated capacity by designated personnel.
2. Slings shall have appropriate test data when purchased. It is the responsibility of the purchaser to ensure that the appropriate test data are obtained and maintained.
3. Re-rated cranes and hoists shall be load tested to 125% of the new capacity if the new rating is greater than the previous rated capacity.
4. Fixed cranes or hoists that have had major modifications or repair shall be load tested to 125% of the rated capacity.
5. Cranes and hoists that have been overloaded shall be inspected prior to being returned to service.
6. Personnel platforms, baskets, and rigging suspended from a crane or hoist hook shall be load tested initially, then re-tested annually thereafter or at each new job site.
7. All cranes and hoists with a capacity greater than 2722 kg (3 tons) should be load tested every four years or on a frequency recommended by the OEM to 125% of the rated capacity. Cranes and hoists with a lesser capacity should be load tested every eight years or on a frequency as recommended by the OEM to 125% of the rated capacity.
8. All mobile hoists shall be load tested at intervals to be determined by the Maintenance Department per manufacturer's recommendations.

h) Training

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Shall be conducted by a qualified, experienced operator/instructor, selected by management. The operator shall undergo operational training under close supervision and be qualified for each designated lifting equipment used. All training and evaluation must be completed before an operator is permitted to use a Crane or Hoist without continual and close supervision. All new or newly transferred employees must work under direct supervision of an experienced qualified employee until they have become proficient in the use of the lift and hoisting equipment.

i) Initial Training - Equipment Use Topics; Operators shall receive initial training in the following:

1. Operating instructions, warnings, and precautions for the type equipment the operator will be authorized to operate.
2. Controls and instrumentation
3. Rigging equipment
4. Equipment Inspection
5. Steering and maneuvering
6. Visibility (including restrictions due to loading)
7. Below-the-hock attachment adaptation, operation, and use limitations
8. Lifting capacity
9. Load Stability
10. Any other operating instructions, warnings, or precautions listed in the operator's manual for the type of equipment that the employee is being trained to operate.

ii) Initial Training - Workplace-related topics: Operators shall receive initial training in the following:

1. Composition of loads to be carried and method of stabilization
2. Pedestrian traffic in areas where the equipment will be operated
3. Narrow aisles or other hazard restrictions

iii) Refresher Training

Shall be conducted annually to ensure that the operator has the knowledge and skills needed to operate the lifting and hoisting equipment.

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Engineering, Facilities, Maintenance or Designee shall maintain written records of inspections and tests. The most recent (previous and current) reports shall be maintained and archived by Schneider Electric, and be readily accessible for review by company personnel and/or external agencies as required by regulation. Training records shall be documented and maintained to include the initial qualification and the most recent refresher training.

6) Revisions

It is the responsibility of the Schneider Electric North America – Safety & Environmental department to review this policy and initiate revisions when necessary. It shall be reviewed no less than every three years.

7) REVISION CONTROL

Revision Level	Date Issued	Reason for Change
New	10/18/11	Updated the format using the SE180A template and standardized the procedure for use throughout North America for the Safety and Environmental Team.
R1	9-1-2012	Updated Inspections to comply with global directive draft, below the hook attachments requirements and the requirement to have safety cables for all hoists that are 200 lbs or less operated 50 times or more per 8 hours. Also includes Training requirements.

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Required Document

CRITICAL LIFTS

A. Scope

This section includes guidelines and requirements applicable to critical lifts and describes the planning and documentation required to complete a critical lift.

B. References

- ANSI/ASME B-30.7 SERIES
- RESPONSIBILITIES

C. Responsibilities

1. Management

- Make determinations of critical lifts
- Provide supervisor and employee training
- Provide safe and proper equipment for critical lifts
- Provide inspection procedures

2. Supervisors

- Follow guidelines and inspection procedures
- Supervise all critical lifts
- Ensure employees have adequate operational knowledge and experience
- Immediately remove from service any equipment that fails inspection

3. Employees

- Follow lifting and rigging procedures
- Immediately report any problems with equipment or procedures
- Not attempt any critical lifts unless authorized and approved

D. Critical Lift Determination

The decision to designate a lift as a critical lift is a management decision. Guidelines provided here are intended to aid in making that decision. A lift should be designated as a critical lift if dropping, upset or collision could cause or result in any one of the following:

1. Damage that would result in serious economic consequences;
2. Damage that would result in unacceptable delay to schedule or other significant deleterious programmatic impact (such as loss of vital data);

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3. Undetectable damage that would jeopardize future operations or safety of a facility;
4. Significant release of hazardous materials to the environment or creation of an undesirable condition;
5. Personnel injury or significant adverse health impact.
6. In addition, a lift that meets one of the following criteria shall be designated as a critical lift:
 - a. Any lift that requires the use of multiple cranes;
 - b. Any lift that exceeds 80% of the crane's rated capacity within the lift configuration of the crane;
 - c. The item to be lifted requires exceptional care in handling because of size, weight, close-tolerance installation, high susceptibility to damage or other unusual factor;
 - d. The item, although non-critical, requires exceptional care in handling because it is being lifted above a critical item.

The manager who has the responsibility for the item being lifted has the authority to require that it be handled as a critical lift. In addition, the manager at the facility where the lift will be performed also has the authority to require that it be handled as a critical lift. The manager who designates the lift as a critical lift shall ensure that a person-in-charge (PIC) is assigned. (The PIC need not be in the manager's organization).

E. Critical Lift Procedures

The PIC shall ensure that a step-by-step procedure is prepared for critical lifts. Although individual procedures are prepared for one-time critical lifts, general procedures may be employed to accomplish routine recurrent critical lifts. For example, a general procedure may be used to lift an item or series of similar items that are frequently lifted or repeatedly handled in the same manner. A critical lift procedure should contain the following, as applicable:

1. Identify the items to be moved.
2. Special precautions, if any (such as outrigger or track cribbing for mobile cranes).
3. Weight of the item and total weight of the load (for mobile cranes, see the manufacturer's instructions regarding components and attachments that must be considered as part of the load).
4. Center of gravity location.
5. A list of each piece of equipment (e.g., crane, hoist, fork truck), accessory, and rigging component (e.g., slings, shackles, spreader bars, yokes) to be used for the lift. (This list shall identify each piece of equipment by type and rated capacity).

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6. Designated checkpoints and hold-points and estimated instrument readings, as relevant, so that the job progress can be checked against the plan.
NOTE: Sign-offs in the procedure are generally appropriate. For example, initial and time/date the procedure as key steps are completed. Hold-points or sign-off points should be provided for personnel assigned to witness the work.
7. Rigging sketch(s), which include the following:
 - a. Lift point identification.
 - b. Method(s) of attachment.
 - c. Load vectors.
 - d. Sling angles.
 - e. Accessories used.
 - f. Other factors affecting the equipment capacity.
 - g. Rated capacity of equipment in the configuration(s) in which it will be used. (For mobile cranes, many factors affect rated capacity, including boom length, boom angle and work area).
8. A load-path sketch that shows the load path and height at key points in the job. (For lifts with mobile cranes, include the crane position(s) relative to the load and relative to surrounding obstructions. Where appropriate, include floor-loading diagrams).
9. A sketch indicating lifting and travel speed limitations. (This may be noted on the load path sketch or on a separate sketch).
10. A sign-off sheet to verify that equipment and tackle inspections or tests are current.
NOTE: Practice lifts are recommended. (If used, requirements for the practice lift should be documented in the procedure).

F. Approval of Critical Lifts

The critical lift procedure should be approved as required by the responsible contractor's procedures. In the absence of direction from the contractor's procedures, a critical lift procedure shall be approved (signed and dated) by the following:

1. Procedure author;
2. Manager of the lift operation;
3. PIC;
4. SH&E Department.

G. Revisions to Critical Lift Procedures

Revisions to the procedures shall be reviewed and approved through the same cycle as the original procedure.

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H. Pre-lift Meeting

Before the critical lift is performed, a pre-lift meeting with all participating personnel shall be held. During the meeting, the critical lift procedure shall be reviewed and questions shall be resolved. The pre-lift meeting shall be documented.

I. Documentation

Critical lift documentation is required. When the job is finished, the PIC shall transmit the critical lift documentation to the manager (or designee) for whom the lift was done. This documentation is subject to audit for one year after the critical lift is completed.

Documentation of a critical lift shall include the following:

1. The critical lift procedure, recording job completion with approval signatures and hold point sign-offs.
2. Documentation of the pre-lift meeting containing, as a minimum, the meeting date and list of attendees. (NOTE: It is recommended that documentation of the pre-lift meeting be included as part of the critical lift procedure.)
3. Any additional documentation deemed appropriate by the PIC or other responsible personnel (e.g., lessons learned).

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Sample Document

Hoist & Auxiliary Equipment Monthly Audit

Company Name: _____ **Facility Address:** _____

Manager/Supervisor: _____ **Date/Time:** _____

Inspector(s): _____

Yes	No	NA	Corr Date	Area Inspected
				1. Is each overhead electric hoist equipped with a limit device to stop the hook travel at its highest and lowest point of safe travel? 2. Will each hoist automatically stop and hold any load up to 125 percent of its rated load if its actuating force is removed? 3. Is the Rated Load of each hoist legibly marked and visible to the operator? 4. Are Stops provided at the safe limits of travel for hoists? 5. Are Controls of each hoist plainly marked to indicate the direction of travel or motion? 6. Is each cage-controlled hoist equipped with an effective warning device? 7. Are close-fitting guards or other suitable devices installed on hoists to assure hoist ropes will be maintained in the sheave grooves? 8. Are all hoist chains or ropes of sufficient length to handle the full range of movement of the application while still maintaining two full wraps on the drum at all times? 9. Are Nip Points or Contact Points between hoist ropes and sheaves (which are permanently located within seven feet of the floor, ground or working platform) guarded? 10. Is it prohibited to use chains or rope slings that are kinked or twisted? 11. Is it prohibited to use the hoist rope or chain wrapped around the load as a substitute for a sling? 12. Is the Operator instructed to avoid carrying loads over people? 13. Are hoists and load bearing structures load tested and annually certified? 14. Are Pelican Hooks equipped with a spring-loaded safety clip to prevent accidental load release? 15. Safety cables applied? <ul style="list-style-type: none"> ❖ lifting capacity of 2000lbs or less ❖ used 50 or more times per eight hour period.