344 Third Street
Baton Rouge, LA 70801
Phone: 225-757-0480

CRANES AND HOISTS

1. Cranes will only be operated by someone who has been and trained by a reputable certifying body to operate any mobile cranes. MAPP Superintendent shall obtain copies of operator certification prior to crane mobilization on any project site. No MAPP personnel shall operate any crane unless approved and verified by the MAPP Safety Department.
2. Only those employees qualified by training or experience shall be allowed to operate equipment and machinery
3. Within 4 years of November 8th 2010, employers must ensure operators be qualified/certified by one of the following methods:
    - Certification by an accredited crane operator testing organization
    - Qualification by an audited employer program
    - Qualification by the U.S. military
    - Licensing by a government entity
4. Whenever there is a safety concern, the operator must have the authority to stop and refuse to handle loads until a qualified person has determined that safety has been assured.
5. All rigging systems shall be inspected prior to each use. All subcontractor riggers shall have appropriate training and documentation shall be provided to the client/contractor upon request.
6. A firm, uniform, level operating area capable of supporting the load and crane shall be provided. Be aware of recently excavated and backfilled areas and verify the bearing capacity prior to setting up on them. Also, it is very important to check for underground pipelines, vessels, valve vaults, etc. that might not support the crane loads and require special support.
7. Equipment must not be assembled or used unless ground conditions are firm, drained, and graded to a sufficient extent so that, in conjunction (if necessary) with the use of supporting materials, the equipment manufacturer's specifications for adequate support and degree of level of the equipment are met.
8. The employer shall comply with the manufactories specification and limitations applicable to the operation of any and all cranes and derricks. Where manufactures specification are not available to limitations assigned to the equipment shall be based on the determinations of a qualified engineer competent in this field a determinations will be appropriately documented and recorded. Attachment used with cranes shall not exceed the capacity, rating, or scope recommended by the manufacturer.
9. The assembly/disassembly of equipment must be directed by a competent and qualified person.
10. The manufacturer's procedures and prohibitions must be complied with when assembling and disassembling equipment.
11. Use approved matting and or blocking under outrigger pads/floats to stay within the bearing capacity of supporting soil.
12. Modification or additions which affect the safety operation of the equipment may only be made with the manufacturer's written approval.
13. A thorough, annual **inspection** of the hoisting machinery shall be made by a competent person, or by a government or private agency recognized by the U.S. Department of Labor.

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The employer shall maintain record of the date's results of inspection for reach hoist machine and piece of equipment at the project office.

13.1. Equipment must be inspected monthly by a competent person. The inspection must be documented.

13.2. Documentation must include the following: items checked, results of inspection, and name and signature of the inspector. Documentation must be retained for 3 months. (Documented monthly inspection not required if the daily inspection is documented and records are retained for 3 months).

14. All crawler, truck or locomotive cranes in use shall meet the applicable requirements for design. Inspection, construction, testing, maintenance and operation as prescribed in the ANSI B30.5-1968, Safety Code for Crawler, Locomotive, and Truck Cranes. However, the written, dated, and signed inspection reports and records of the monthly inspection of critical items prescribed in section 5-2.1.5 of the ANSI B30.5-1968 standard are not required. Instead the employer shall prepare a certification record which included the date the crane items were inspected: signature of the person who inspected the crane items: and a serial number, or other identifier, for the crane inspection.
15. All outriggers on all mobile cranes must be fully extended when the crane is used to lift or support loads. Outriggers shall hold all tires within the boundary of the outriggers off the ground and the crane shall be level for all lifts.
16. Conspicuously post in all cranes, hoists, and other equipment the:
    - Rated load capacity charts matching the serial number of the crane,
    - Recommended operating speeds,
    - Special hazard warnings, and
    - Other essential information.
17. A Critical Lift Plan will also be done where the load reaches 75% of the cranes capacity. The lift plan shall address at minimum ground condition, equipment inspection, swing radius, overhead work barricades, crane setup, weather conditions, and rigging.
18. Telescopic boom cranes (hydraulic cranes) shall be equipped with an anti-two-block device (A2B), for all points of potential two-blocking, e.g., jibs, boom extensions, main booms.
19. Lattice boom cranes shall be equipped with an anti-two-block device or a two-block warning feature with both an audible and visual alarm for all points ofpotential of two-blocking.
20. Cranes are designed to lift freely suspended loads which are loads hanging freely with no direct external force applied to them except by the lift cable. Cranes should not be used to lift loads with unknown external loads such as pulling embedded piling, etc. Load lines should be kept vertical so that no side pull is exerted on the crane's boom.
21. Wind speed and other weather conditions such as cold conditions affect crane capacity and should be taken into consideration.
22. Accessible areas within the swing area of the counterweight or equipment must be barricaded to prevent personnel from being crushed.
23. A fire extinguisher of not less than 5 BC rating must be available at all operator stations or cabs of cranes.

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24. No less than two full wraps of load line cable or boom line cable shall remain on the load/boom drum when the hook is in the extreme low position or the boom is lowered to its lowest position level with the crane-supporting surface.
25. Safety latches are required on all crane hooks.
26. Cranes with suspended loads shall never be left unattended.
27. The operator shall not leave the cab of the crane with the crane's motor running.
28. Whenever internal combustion engine powered equipment exhaust in enclosed spaces, appropriated diverting exhaust outside enclosed structure or test shall be made and recorded to see that employee are not exposed to unsafe concentrations of toxic gases or oxygen deficient atmospheres.
29. Modification or additions which affect the safety operation of the equipment may only be made with the manufacturer's written approval.
30. The work zone shall be identified by demarcating boundaries such as flag and range limiting devices, or defining the work zone as 360 degrees around the equipment up to the maximum working radius. The hazard assessment must determine if any part of the equipment could get closer than 20 feet to a power line.
31. All mobile cranes operational ranges shall be barricaded.
    31.1. If barricades are not applicable a spotter can be utilized to block pedestrians from entering dangers zones created by the equipment and surrounding structures.
32. If it is determined that any part of the equipment, load line or load could get closer than 20 feet to a power line then at least one of the following measures must be taken:
    1. Ensure the power lines have been de-energized and visibly grounded
    2. Ensure no part of the equipment, load line or load gets closer than 20 feet to the power line
    3. Determine the line's voltage and minimum approach distance permitted in Table A.

TABLE A—MINIMUM CLEARANCE DISTANCES

Voltage (nominal, kV, alternating current)	Minimum clearance distance (feet)
up to 50	10
over 50 to 200	15
over 200 to 350	20
over 350 to 500	25
over 500 to 750	35
over 750 to 1,000	45
over 1,000	(As established by the utility owner/operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution).

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Note: The value that follows "to" is up to and includes that value. For example, over 50 to 200 means up to and including 200kV

33. Safety devices are required to be on all equipment and must be in proper working order before operations begin. If any of the devices are not in proper working order the equipment must be taken out of service and operations must not resume until the device is working properly again. Examples of safety devices may include: crane level indicator, boom stops, jib stops, foot pedal brake locks, horns, etc.
34. The operator shall have access to procedures applicable to the operation of the equipment. Procedures include rated capacities (load charts), recommended operating speeds, special hazard warnings, instructions and operator's manual.
35. A signal person must be provided for the following situations:
    - The point of operation is not in full view of the operator
    - The view is obstructed when the equipment is traveling
    - The operator or the person handling the load determines it is necessary due to site-specific concerns.

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LIFT PLAN

1 PROJECT DATA

CLIENT:		**WORK ORDER BY:**	
JOB NUMBER:		**P.O./CONTRACT #**	
MAIN CRANE LIFTING POINTS:			
LIFT ACCOMPLISHMENT DATE:			

WORK PERFORMED:

2. CRANE DEFINITION		**3. LOAD DATA**	
Manufacturer:		A Lift Description:	
Model:			
Serial No:		Equipment Number Name:	
Crane Description:		Dimension (L/W/H)	
Area of Operation		Total Gross Weight:	
Crane Yearly Inspection Date:		From Location to Location:	
		B. Maximum Operating Radius to used During Lift (ft)	

4 CRANE CONFIGURATION			
Main Boom		Jib to be Used?	( ) Yes / ( ) No
No Sections:		No. Sections:	
Boom Length:		Jib Size:	
Boom Type:		Jib Length:	
Hoisting From Main Boom:		Jib Type:	
Main Parts of Line:		Jib Offset Angle:	
Main Boom Line Size (Dia)		Jib Capacity of line @ Parts	
Capacity of line @ Parts:		Jib Max. Load Radius	
Max. Load Radius:		Jib Max. Capacity of Lift Point	
Main Boom Max Capacity of Lift Point:		Jib Length of Boom	
Length of Main Boom at Pick (Deg):		Jib Angle of Boom at Pick (Deg)	
Angle of Main Boom at Set (Deg):		Jib Angle of Boom at Set (Deg)	
		Type of Surface:	
		Ground Compact & Stable( ) Yes / ( ) No	
		Structural Support Required ( ) Yes / ( ) No	

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LIFT PLAN

5 LIFT WEIGHT DATA AND CALCULATIONS			
Weight of Load to be Lifted (lbs)		Other:	
Max Load Line Weight (lbs)		Down Haul Weight:	
Load Block Weight (lbs)		Jib Stowed ( ) Yes / ( ) No	
Rigging - Lifting Beams	Qty:	Weight of Crane Components	
Rigging - Slings	Qty:	Total Weight of Lifted Load and Crane Components:	
Type:	Capacity:	Total Weight Plus Factor Of(1.10):	
Rigging - Shackles	Qty:	Percent Capacity This Lift:	%
Type:	Capacity:		

6. LIFT ADMINISTRATION CHECKLIST			
Has pre-lift meeting been held with signal person/riggers/operator/site supervisor			( ) Yes / ( ) No
Operator assigned for the Lift **(name):**			
Signal person designated **(name)**			
Communication will be held by **Hand Radio Both** or **Other**:			
Has JHA been completed:	( ) Yes / ( ) No		
Has Swing Clearance Been Checked	( ) Yes / ( ) No		
Has area been checked for safe entry and exit	( ) Yes / ( ) No		
Tag lines are to be used:	Description **( ) Diameter ( ) Length**		
Pre-Lift Huddle Conducted/Permit	( ) Yes / ( ) No		
Potential Hazards To Be Addressed:			
Weather: ( )Yes / ( )No If yeas please explain:			
Electricity: ( )Yes / ( )No If yes please explain:			
What is Max Winds Speed expected:	( ) 15 MPH consider reassessing lift continuation. ( ) 20 MPH Stop Lift		
Surrounding Obstacles: ( ) Yes ( ) No If yes please explain:			

7. SIGNATURES OF PLAN DEVELOPERS & REVIEWERS			
Person responsible for lift: (operator)			
	Print	Signature:	Date
Site Supervisor:			
	Print	Signature :	Date
Client Representative:			
	Print	Signature:	Date
Other:			
	Print	Signature :	Date

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LIFT PLAN

Critical Lifts:

1 Any lift, above 15 tons, over an operating unit, shelter or building

2 Any lift with a load greater than 50 tons

3 Any lift in which the combination of weight and lift radius will load the crane in the use above 80% of its rated capacity

4 Any lift requiring the use of more than one crane

5 Any lift in which a significant risk of personnel injury or equipment damage is possible