

EQUIPMENT OPERATION

CRITICAL LIFT WORKSHEET

PROJECT: _____ DATE: _____ PREPARED BY: _____

1. CRANE DATA

- 1) Make & Model # _____
- 2) Unit # _____
- 3) Crane Type: _____
 _____ Crawler mounted lattice boom _____ Carrier mounted lattice boom
 _____ Grove telescope boom _____ Other _____ Boom Type _____
- 4) Lattice Boom Model & Type:
 _____ Angle Chord _____ Offset Tip
 _____ Tubular Chord _____ Tapered Tip
 _____ Hammerhead
- 5) Boom Length _____ ft.
- 6) Jib Model _____ Length _____
- 7) Counterweight _____ lbs. Offset _____
- 8) Is the Crane working on Trestle? _____ Yes _____ No
 If Yes has the Engineering Department been contacted? _____ Yes _____ No
 If No contact the Engineering Department to verify trestle is rate for Crane.

2. LOAD CAPACITY

Operating by the "seat of the pants" is very dangerous and will not be tolerated. Never use signs of tipping to determine if a load is within capacity. Either find out how much the load weighs and use the load chart or don't lift it at all.

- 9) Exact Load Weight _____ 9) Size of Load _____

10) Calculate Net Capacity

<u>Net Capacity = Gross Capacity - Capacity Deductions</u>	
_____ Lbs. Gross Capacity at _____ ft. radius	
_____ Lbs. Rigging Weight (i.e., shackles, slings, picking beams)	
_____ Lbs. Main Block	
_____ Lbs. "Effective" Jib Weight	
_____ Lbs. Cable	
_____ Lbs. Headache Ball	
_____ Lbs. Others _____	
_____ Lbs. Net Capacity vs. _____ Lbs. Exact Load Weight	

Net Capacity must be equal to or greater than exact load weight.

- 11) Maximum Load Radius ft. 13) Minimum Load Radius _____ ft.
- 12) Maximum Boom Angle ° 14) Minimum Boom Angle _____ °

3. RIGGING

- 15) _____ Min. # parts of Hoist Line = Gross Capacity (refer to load chart or calculate according to the formula on the back of page 1)

- 16) Sling Construction: Dia. Inches _____ # Parts _____
 Wire core/mechanical splice _____ Fiber core/hand splice _____
- 17) Number of Legs _____ 18) Sling Angle _____
- 19) Sling Capacity _____ lbs. (refer to charts on the back side)
- 20) Means of Fastening Sling or Hoist Hook to Load _____
- 21) The capacity of Fastener, i.e., Shackle, Picking Eye, etc. _____ lbs.

4. PRE-LIFT REQUIREMENTS (All must be answered YES.)

- 22) ___ Load chart utilized is for exact crane model, boom type, & length
- 23) ___ The competent person in charge of lift: Name _____ Title _____
- 24) ___ The competent signal person identified: Name _____ Title _____
- 25) ___ The competent rigging person identified: Name _____ Title _____
- 26) ___ Pre-pick meeting held with pick crew
- 27) ___ Written crane inspection completed within 14 days
- 28) ___ Swing path not over personnel
- 29) ___ Footing is sound
- 30) ___ Minimum clearances from power lines can and will be maintained
 (Under 50 KV - 10' clearance --- Over 50 KV - See OSHA Standard)
- 31) ___ The load radius has been measured with a tape measure
- 32) ___ Wind speed does not exceed 30 mph. Some "sail" loads limited to 20 mph.
- 33) ___ A load will not touch boom in vertical lift
- 34) ___ For Dual Crane Lift, full compliance with "JB Dual Crane Lift Policy."
- 35) ___ If on a barge, the Project Manager has reviewed stability and potential list conditions
- 36) ___ Taglines are long enough, tied only to the load, and in good condition - loose end controlled by designated person
- 37) ___ Operating locations are far enough away from shoring, excavations, and trenches to eliminate the risk of collapse
- 38) ___ Application of hardwood mats has been carefully considered
- 39) ___ Outriggers or crawler tracks are fully extended, and wheels are clear of the ground
- 40) ___ Application of blocking under outrigger pads has been carefully considered
- 41) ___ Adequate swing clearance (minimum 2 feet) between the counterweight and any obstacles
- 42) ___ Boom composition is correct
- 43) ___ No added counterweight
- 44) ___ Crane is level and has been chocked with carpenter's level
- 45) ___ If the crane is not level within 1°, the blue load chart is applicable.
 When using the blue chart, the crane must not exceed 3° off level.
- 46) ___ Also, if the blue chart is used, has maximum boom length been carefully considered
- 47) ___ The machine is rigged with an adequate number of Parts of Hoist Line (#15 above)

APPROVAL SIGNATURES

PROJECT MANAGER:

PROJECT SUPERINTENDENT

_____ Date: _____

_____ Date: _____