SAFETY INSPECTION CHECK LIST FOR CONSTRUCTION EQUIPMENT U.S. Army Corps of Engineers, Memphis District	Date of Inspection
Contractor	Contract No
Type of Equipment & Boom Length	Make, Model No., Identification
Inspected by (Signature)	Approved by (Signature)

Activity / Equipment Inspected:

CRANES AND DERRICKS

NOT Rev for 96 ver. EM 385-1-1

NOTE: Corps of Engineers General Safety Requirements (EM 385-1-1) references are shown in parentheses.	Yes	No	Not Appl
1. Is a list of the required clearance from overhead power lines posted? If necessary to work near power lines, boom shall have insulating cage guard and load line shall have insulating link. (11.E.04 & 11.E.07)			
2. Are load rating plates posted in view of the operator? (16.C.02)			
3. Is a list of standard hand signals posted in cab? (08.B.02)			
4. Are shock absorbing boom stops installed on machine? (16.D.06)			
5. Do stops control vertical motion of boom with gradually increasing resistance from 83^{o} or less (without impact) and limiting vertical rise to 88^{o} above horizontal?			
6. Do the boom angle, levelness, and other indicators operate accurately and within sight of operator? (16.D.04)			
7. Does the unit have a suitable fir extinguisher (minimum rating of 5-B:C)? (16.A.26)			
8. Are moving parts, gears, drums, shafts, belts adequately screened or guarded? (16.B.07)			
9. Is adequate protection from hot pipes, etc. provided? (16.B.03)			
10. Are steps, ladders, guard rails provided for safe footing and access? (16.B.03)			
11. Can lubrication and greasing be done safely? (16.B.13)			
12. Is the cab equipped with unbroken safety glass? (16.B.10)			
13. Is the fuel tank located so that overflow and spills will not run into cab or come into contact with exhaust? (16.B.04)			
14. Is the unit shut down for fueling, servicing, etc? (16.A.14)			
15. Are slings and their fittings and fastenings, inspected daily by a qualified person and wire ropes inspected frequently by a competent person? (15.A.01 & 15.E.01)			
16. When wedge socket type fasteners are used, has the dead end been made secure against loosening? (15.B.04)			
17. Have the air tanks been tested and certified? (20.A.02)			
18. Are test and inspection records kept available as a part of the official project file? (20.A.03)			
19. Is there evidence of deformed, cracked, or corroded members in the crane structure or boom? (16.C.12)			
20. Do the drums have proper pawls or positive locking devices?			
21. Is sufficient cable available to allow three full wraps on the drum at all working positions? (15.F.08)			
22. Are daily inspections being made of all control mechanisms to assure that there is no maladjustment interfering with proper operation? (16.C.07)			
23. Are inspections being made, at least monthly, of control mechanisms for excessive wear of components, and contamination by lubricants or other foreign matter? (16.C.07)			
24. Are frequent (daily to monthly) inspections being made of all safety devices?			
25. Are daily inspections for deterioration or leakage in air or hydraulic systems being made?			
26. Are crane hook inspections being made frequently (daily to monthly) to assure that there are no cracks or that the normal hook throat opening has not increased more than 15%?			
27. Is there evidence of loose bolts or rivets?			
28. Is there evidence of cracked or worn sheaves or drums? (15.F.09)			
29. Are parts such as pins, bearings, shafts, gears, rollers, and locking devices worn, cracked or distorted?			

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30. Is there evidence of excessive wear on brake and clutch system parts?			
31. Is there evidence of excessively worn or damaged tires?			
32. Is the power plant in good mechanical condition?			
33. Are accessible areas within the swing radius of the rear barricade?			

34. Crane Stability Test:

Amount of counterweight: _____ lb

Boom Angle	Distance from Center Pin to Load Line R (ft)	Tipping Load _____ / (lb) _____ With Outriggers	Tipping Load _____ / (lb) _____ Without Outriggers	Moment / _____ R x / _____ With Outriggers	Moment / _____ R x / _____ Without Outriggers	Maximum Allowable Load _____ L = 0.75/ _____ With Outriggers	Maximum Allowable Load _____ L = 0.75/ _____ Without Outriggers
20°	_____	_____	_____	_____	_____	_____	_____
40°	_____	_____	_____	_____	_____	_____	_____
60°	_____	_____	_____	_____	_____	_____	_____
80°	_____	_____	_____	_____	_____	_____	_____

35. Performance Test:

a. Complete items 1 – 31 on this form.

b. Determine performance test load (PTL) from the stability test above with the boom at the 80° position.

PTL = (1.25) * (L)

c. Position the boom at 80^ and allow the crane to lift, lower, swing, and hold the performance test load.

36. Remarks: