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C-DAC

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FLOATING CRANES AND FLOATING DERRICKS

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TITLE 29CFR1919

29CFR1926.550 COMPARISON ASME B30.8

- **FLOATING CRANES AND DERRICKS**
- Rated load shall not exceed original capacity specified by manufacturer.
- A load rating chart shall be provided.
- Revised load rating chart.
- Mobile cranes on barges shall be positively secured.
- **PERMANENTLY MOUNTED FLOATING CRANES AND DERRICKS**
- Capacity and limitations based on competent design criteria.
- A load rating chart shall be provided.
- Meet the applicable req'ts for design, construction,installation, testing, maintenance, (inspection) and operation prescribed by the manufacturer

- **MATERIAL HANDLING OPERATIONS**
- **1926.605**

  If construction material handling falls under the definition of longshoring or shipyard work, company must then comply with 29CFR1918 or 1915 respectively, See .605 and STD 03-13-002

- **FLOATING CRANES AND FLOATING DERRICKS**
- 8-1.1.1 mentions stability and freeboard of the floating platform, barge or pontoons.
- 8-1.1.2 mentions rated loads considering list and trim for each installation.
- 8-1.1.3 Rated load markings (chart) shall include list and trim conditions on which chart is based.
- Load chart also to contain precautionary notes relative to limitations, i.e. deck loads, list, trim, weather, etc.
- 8-1.2.1
- (a) Cranes and Derricks shall be constructed to meet all stresses imposed under normal operating conditions
- (b) Barges and pontoons shall be constructed to withstand imposed loads
- .(c) Welding shall conform to the recommended practices of American Welding Society (AWS D1.1 or 14.3)
- **STABILITY**
- 8-1.2.2(a)(3) Land Cranes and Derricks Mounted on Barges; the maximum allowable list or trim shall be 5° or the maximum allowed by the crane manufacturer. This is a misnamed paragraph since it does not deal with vessel stability.

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PROPOSED NEW WORDING

- Prior to moving a mobile crane on a barge or pontoons, the following shall be determined by a qualified person:
- (a) That the barge structure can withstand the anticipated static and dynamic loads of the crane, the lifted load and other deck loads.
- (b) That the barge hull is subdivided with one or more longitudinal watertight bulkheads to reduce the free surface effect
- (c) That there is access to void compartments below deck to allow for inspection and pumping (when necessary).
- (d) That the machine (crane) list and trim be evaluated for the full range of anticipated crane operations.
- (e) That the load chart be modified (revised downward) to stay within the crane manufacturer's or a qualified person's specifications and limitations for the calculated conditions of machine list and trim
- (f) That the tie-downs or anchorage for the crane and/or derrick be determined by calculation of a qualified person.
- (g) That the crane be inspected and certificated by a person or agency accredited under Title 29CFR1919
- (h) That each certification document be accompanied by the field notes, calculations, sketches and other data generated or derived by the certifier.
- (i) That the floating crane or derrick not be used if the certifier has issued a "Notice of Deficiency"
- (j) That the employer abide by the limitations prescribed by the certifier.
- (k) That a lift plan be developed when anticipated lifted loads exceed 75% of the capacity of the crane.
- The LIFT PLAN shall:
- State the crane manufacturer's maximum load limits for the entire range of the lift.
- Specify the exact size and weight of the load to be lifted.
- Identify the lift geometry and procedures
- Designate the crane operator, lift supervisor and rigger and state their qualifications.
- Identify the signalman
- Identify the work site including hazards such as electrical power lines.
- Identify limitations, i.e. conditions under which lift operations will be stopped.
- Specify coordination and communication requirements.
- That crane operations be suspended when the seas or wind and weather conditions exceed predetermined levels.