



Mobile Crane Inspections – Special Emphasis on Frequent Inspections

The American National Standards Institute, ANSI B30.5, 1968, and OSHA both require inspections be divided into two categories: **frequent and periodic**. In this toolbox talk, we will be discussing frequent inspections. This toolbox talk will aid in compliance with OSHA's 1926.550 Construction Standard.

Frequent inspections are performed at the start of each shift by the crane operator. The operator walks around the crane looking for defects or problem areas that could have a direct bearing on the safety of the crane. Frequent inspections should include, but are not limited to the following:

YES NO

- | | | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Are all exposed moving parts guarded? |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Did you visually inspect each component of the crane used in lifting, swinging, or lowering the load or boom for any defects that might result in unsafe operation? |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. Inspect all wire rope (including standing ropes), sheaves, drums rigging, hardware, and attachments? Hooks with cracks, excessive throat openings of 15%, or hook twists of 10 degrees or more, must be removed from service. |
| <input type="checkbox"/> | <input type="checkbox"/> | 4. Check for freedom of rotation of all swivels? |
| <input type="checkbox"/> | <input type="checkbox"/> | 5. Visually inspect the boom and jib for straightness and any evidence of physical damage, such as cracking, bending, or any other deformation of the welds. Look for corrosion under any attachments that are connected to the chords and lacing. Watch carefully for cracking or flaking of paint. This may indicate fatigue of the metal, which often precedes a failure. On lattice booms, look for bent lacing. If they are kinked or bent, the main chord can lose substantial support in that area. |
| <input type="checkbox"/> | <input type="checkbox"/> | 6. Inspect tires for cuts, tears, breaks, and proper inflation? |
| <input type="checkbox"/> | <input type="checkbox"/> | 7. Visually inspect the crane for fluid leaks, both air and hydraulic? |
| <input type="checkbox"/> | <input type="checkbox"/> | 8. Visually check that the crane is properly lubricated? The fuel, lubricating oil, coolant and hydraulic oil reservoirs should be filled to proper levels. |
| <input type="checkbox"/> | <input type="checkbox"/> | 9. Check that the crane is equipped with a fully charged fire extinguisher and that the operator knows how to use it? |
| <input type="checkbox"/> | <input type="checkbox"/> | 10. Check all functional operating mechanisms such as: sheaves, drums, brakes, locking mechanisms, hooks, the boom, jib, hook rollers brackets, outrigger components, limit switches, safety devices, hydraulic cylinders, instruments, and lights? |

This is page one of a two-page toolbox, be sure to see page 2 for more information

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YES NO

- 11. Check the turntable connections for weld cracks and loose or missing bolts? If they are loose, there is a good chance that they have been stretched.
- 12. When checking the outriggers be sure that neither the beams nor the cylinders are distorted. Check that the welds are not cracked and that both the beams and cylinders extend and retract smoothly and hold the load? Check the condition of the floats, and check that they are securely attached?
- 13. Inspect and test all brakes and clutches for proper adjustment and operation?
- 14. Inspect boom hoist lockout and other operator aids, such as anti-two-block devices (ATB) and load moment indicators (LMI), for proper operation and calibration?
- 15. While the engine is running, check all gauges and warning lights for proper readings and operate all controls to see that they are functioning properly?
- 16. Check for any broken or cracked glass that may affect the view of the operator?

Don't let this happen to you...



For more information on Crane Accidents, including this photo, refer to:
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