

OSHA Compliance Checklist

Overhead and Gantry Cranes (1910.179)

	O.K.	Action Needed
General Requirements		
1. Is the rated load of the crane plainly marked on each side of the crane?		
a. Is the marking clearly visible from the floor?		
2. Is a clearance of 3 inches maintained laterally between the crane and the nearest obstruction?		
3. Are only designated personnel permitted to operate the crane?		
Stops, Bumpers, Rail Sweeps, and Guards		
1. Are stops provided at the limits of travel of the trolley?		
a. Are stops fastened to resist forces applied when contacted?		
b. Are stops engaging the tread at least equal in diameter to the radius of the wheel?		
2. Is the bridge provided with bumpers, or is the trolley operated at a sufficiently slow speed?		
3. Is the trolley provided with bumpers or is the trolley operated at a low rate of speed?		
4. Are guards provided:		
a. To prevent hoisting rope fouling, if needed?		
b. To prevent contact between the bridge electrical conductors and the hoisting mechanism?		
5. Are all exposed moving parts guarded that might constitute a hazard under normal conditions?		
a. Are all guards securely fastened?		
b. Is the guard substantial enough?		
Brakes		
1. Is each independent hoisting unit equipped with at least one self-setting brake?		
2. Does the braking mechanism prevent overspeeding?		
3. Has the holding brake been tested to ensure sufficiency?		
4. Are holding brakes on hoists applied automatically when power is removed?		
5. Does the control brake maintain a safe lowering speed at all times?		
6. Are foot-operated brakes easily applied with foot pressure?		
7. Are all foot brake pedals constructed so that operator's foot will not easily slip off the pedal?		
8. Are all foot-operated brakes equipped with an automatic means for positive release when pressure is released from the pedal?		
9. Are all brakes for stopping the motion of the trolley of sufficient size to stop the trolley within a safe distance?		
Electric Equipment		
1. Is the control circuit current less than 600 volts (AC or DC)?		
2. Is the pendant control voltage less than 50 volts AC?		
3. Are all pendant units protected against strain?		
4. Are pendant controls adequately grounded?		
5. Are all buttons clearly marked as to their purpose?		
6. Is the contact with live parts prevented?		
7. Is all electrical equipment protected from dirt, oil, grease, and moisture?		
8. Are cranes equipped with a way to prevent inadvertent reenergization in the event of a power failure?		

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9. Do all pendant push buttons return to the off position when pressure is released?		
10. Is the power supply to runway conductors controlled by a fixed circuit breaker accessible from the floor?		
11. Are sufficient emergency disconnects provided?		
12. Are all electrically driven traveling cranes provided with a limit switch in the hoisting direction?		

Hoisting Equipment

1. Are all sheave grooves smooth and free of defects?		
2. Are the ropes on the sheaves prevented from binding?		
3. Are only loads lifted that are below the manufacturers load limit for the ropes being used?		
4. Is there more than 2 wraps of rope left on the drum when the hook is in its extreme low position?		
5. Is the rope end securely attached?		
6. Are all hooks used in accordance with the manufacturers' recommendations?		

Inspection

1. Have all new cranes been inspected to ensure compliance with 1910.179?		
2. Are all the following items inspected for maladjustment at least daily for each days use:		
a. All functioning mechanisms?		
b. Visual inspection of hooks with deformations or cracks?		
c. Visual inspection of hoist chains for excessive wear, twist, distorted links or stretch?		
3. Are the following items inspected at least monthly:		
a. Deformed or distorted hooks, with a certification by the person doing the inspection, date of inspection, serial number of the hook, and the inspector's signature?		
b. All functional operating mechanisms for excessive wear?		
c. All ropes for compliance with manufacturer's recommendations?		
4. Are comprehensive inspections made to identify the following items at least annually, or more frequently if necessary: Loose bolts or rivets; deformed, cracked, or corroded members or parts; excessive wear on brake system parts; inaccuracies in load indicators; improper wiring; and the proper operation of all control mechanisms?		
5. Are cranes that have been idle for more than a month inspected for the requirements contained in 2 & 3 above, before they are placed back into service?		
6. Are cranes that have been idle for longer than 6 months been given a compliance inspection that includes items 2, 3, & 4 above, and a complete inspection of ropes (see Inspection of Ropes, below)?		

Testing

1. Are all new and modified cranes tested prior to use to include the following:		
a. Hoisting and lowering?		
b. Trolley travel?		
c. Bridge travel?		
d. Limit switches?		

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Maintenance		
1. Has a preventative maintenance program been established based on the manufacturer's recommendations?		
2. For all adjustments and repairs, are the following precautions taken:		
a. Is the hoisting mechanism and load secured?		
b. Are all controllers in the off position?		
c. Is the unit deenergized, locked and tagged out?		
d. Is a warning sign placed on the crane ("Out of Order")?		
3. Are all unsafe conditions repaired before the crane is allowed back into operation?		
4. Are all crane hooks with cracks in excess of 15 percent of the normal throat opening, or with more than a 10 degree twist from normal removed from service and discarded?		
5. Are all pendant controls kept clean and function labels kept legible?		
Rope Inspection		
1. Is a thorough inspection of all running ropes (wire ropes that raise and lower the load) made at least monthly?		
2. Are inspections documented by a certification record which includes the date of the inspection and the signature of the person doing the inspection?		
3. Are all inspections records available for review?		
4. Are conditions that could create an appreciable loss of rope strength corrected promptly (includes worn, corroded, cracked, severely kinked or crushed wires)?		
5. Are all ropes that have been idle for more than a month given a thorough inspection before they are used?		
a. Is the inspection documented as in 2, above?		
6. Is care taken to ensure only loads are attached that can be safely handled:		
a. By ensuring the load weight restrictions are observed?		
b. By ensuring that loads are attached with the chain or rope that are free of kinks or twists and is not wrapped around the load?		
c. By ensuring that the load is attached to the load block by slings or other devices?		
7. Is care taken to ensure that the load is secured and properly balanced before the load is moved?		
8. During movement, is care taken to ensure that:		
a. The hoist rope is not kinked?		
b. Multiple lines are not wrapped around each other?		
c. The hoist is not used to swing or side pull the load?		
9. Are crane operators prohibited from carrying loads over people?		
10. Are employees prohibited from riding on the load or hook?		
11. Do the operators routinely test the brakes when a load approaching that of the load limit is lifted?		
12. Are operators prohibited from leaving their positions when a load is suspended?		
13. Is a warning signal used to notify personnel if the load approaches near or over them?		
14. Is the load-raising limit switch tested prior to each shift in which is to be used?		
Other Requirements, General		
1. Are all operators familiar with the operation and care of fire extinguishers?		