

# OVERHEAD CRANE SAFETY & INSPECTION GUIDELINES



## INSPECTION CLASSIFICATION

OSHA 1910.179 regulations and ANSI B30 standards require that overhead cranes be inspected on a routine basis, and the following overhead crane safety inspection guide provides you with a detailed summary of the inspection points as well as their required frequency. Inspection points are divided into two categories, based on how frequently they need to be inspected:

### FREQUENT INSPECTION

Daily to monthly intervals based upon the age and condition of the unit and its history of found defects

### PERIODIC INSPECTION

One- to 12-month intervals based upon the age and condition of the unit and its history of found defects



## QUALIFIED INSPECTOR

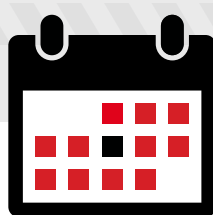
The frequent and periodic inspections must be performed by a designated (qualified) person who possesses the skills, training and experience to properly identify any safety or operational deficiencies that may cause a hazard or violate a code or standard. All inspection reports must be retained for each piece of equipment.



## FREQUENT INSPECTION

These items must be inspected on a frequent basis, either every day or every month, to ensure they do not create a safety hazard when the crane is in use.

- All functional operating mechanisms must be checked for maladjustment that may interfere with proper operation each day.
- Lines, tanks, valves, drain pumps, and other parts of air or hydraulic systems must be inspected daily for leaks or deterioration.
- Hooks must be visually inspected daily for deformation or cracks, followed by a monthly inspection that is verified with a certification record.
- Hoist chains must be inspected daily for excessive wear, twisting or distorted links that could interfere with proper functioning, including links that are stretched beyond the manufacturer's recommendation — to be followed by a monthly inspection accompanied by a certification record.
- All functional operating mechanisms must be inspected frequently for excessive wear.
- Rope reeving must be checked for noncompliance with the manufacturer's recommendations.



## PERIODIC INSPECTION

These are items that OSHA says should be inspected on a less-frequent basis, generally either monthly or annually.

- Cranes must be inspected for any deformed, cracked or corroded members.
- Loose bolts or rivets must be checked.
- Pins, bearings, shafts, gears, rollers, locking and clamping devices must be checked regularly for signs of wear, cracking or distortion.
- Brake system parts, linings, pawls and ratchets must be inspected for excessive wear.
- Load, wind and other indicators that are over their full range must be inspected to identify any significant inaccuracies.
- Power plants — whether gasoline, diesel, electric or any other type — must be checked for improper performance or noncompliance with applicable safety requirements.
- Chain drive sprockets must be checked for excessive wear, and chains should be examined for excessive stretch.
- Any electrical apparatus must be checked for signs of pitting or any deterioration of controller contactors.



## FOR CRANES NOT IN REGULAR USE

Cranes that have been idle for more than one month but less than six months must be given a complete inspection according to OSHA's frequent inspection points before putting them in service. Any crane that has been idle for six months or longer must be inspected according to the periodic and frequent inspection points specified by OSHA above. OSHA also recommends that standby cranes need to be inspected at least twice a year for the periodic and frequent inspection points.



## REQUIRED REPAIRS

Safety deficiencies that are found during the course of the inspection must be repaired by a qualified person prior to the crane being placed back into operation.