

# Overhead Crane and Hoist Inspection Checklist

Per the regulation [WAC 296-24-23519](#), overhead cranes and hoists must be inspected before use. Inspection procedures for overhead cranes are divided into two general classifications, based on the interval at which inspection should be performed: **frequent** and **periodic**.

This Overhead Cranes/Hoists Inspection Checklist contains **frequent** inspection requirements, **periodic** inspection requirements, and wire rope/chain inspection information for overhead cranes and hoists.

- Complete a **pre-operation inspection** using the frequent checklist items on the inspection checklist prior to crane/hoist use.
- The operator or other designated person conducts the inspection.
- Cranes/Hoists in regular use must have a documented inspection checklist at least **monthly** using the **frequent inspection**.
  - Cranes/Hoists idle for *1 to 6 months* must have a documented **frequent inspection** before use.
  - Cranes/Hoists idle for *more than 6 months* must have a documented **periodic inspection** before use (refer to instructions below).
- Deficiencies identified during the pre-operation inspection must be addressed before use.
- Inspectors must sign and date the inspection log or checklist to confirm completion.
- Inspectors must keep a record of all frequent and periodic inspections for one year.

**Periodic inspections** must be completed by qualified personnel. Overhead cranes and hoists in regular use must have a periodic inspection at least **annually**. Refer to the [Cranes, Hoists and Rigging Safety webpage](#) on the EH&S website for more information on periodic inspections and a list of Seattle area crane inspection firms with qualified personnel.

Any overhead cranes/hoists with deficiencies identified during an inspection must be tagged “out of service,” repaired, or corrected before use. All active cranes should have regular preventive maintenance performed in accordance with the manufacturer’s recommendations.

## Overhead Crane and Hoist Inspection Checklist

Type of crane: \_\_\_\_\_ Crane capacity (tons): \_\_\_\_\_

Location: \_\_\_\_\_ Hoist capacity (tons): \_\_\_\_\_

Item	Inspection Frequency: * = required		Part of Crane/Hoist to be Inspected	Inspect for:	Equipment Condition:		
	Frequent (once per month)	Periodic (more than 6 months)			OK	Faulty	N/A
1	*	*	Controls and operating mechanisms (includes pendant)	Improper adjustments, excessive wear, and unusual noises; ensure all controls function properly and each performs as marked.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	*	*	Lines, Tanks, Valves, and Other Parts in Air or Hydraulic Systems	Deterioration or leakage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	*	*	Hooks	Deterioration or cracks; hooks must be thrown away immediately if: a) Throat opening is more than 15% in excess of normal throat opening or; b) Hook tip is more than 10° twist from the plane of the unbent hook. c) safety latch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	*	*	Chains and End Connections	Excessive wear, twist, stretch or distortion of links beyond manufacturer's specs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	*	*	Safety Devices, Belt-Chain Gear Guards	Improperly adjusted, missing, or broken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	*	*	Outriggers	Locking devices and general condition foundation and cribbing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	*	*	Fire Extinguisher (readily accessible)	Missing or discharged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	*	*	Pre-operational test; upper limit switch operating properly	Verify proper operation of the upper limit and lower limit devices under no-load conditions. Listen for unusual sounds when operating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9		*	Boom and Crane Structure	Bent or twisted parts broken welds, cracks, dents, deformation, heavy rust	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10		*	Bolts and Rivets	Loose or missing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11		*	Sheaves and Drums	Excessive wear, cracks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12		*	Pins, Bearings, Shafts, Rollers,	Excessive wear, distortion, cracks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Item	Inspection Frequency: * = required		Part of Crane/Hoist to be Inspected	Inspect for:	Equipment Condition:		
	Frequent (once per month)	Periodic (more than 6 months)			OK	Faulty	N/A
			Gears, Locking and Clamping Devices				
13		*	Brake System	Excessive wear or improper operation of brake system parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14		*	Indicators (Load, Wind, Boom Angle)	Significant inaccuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15		*	Chain Drives, Sprockets	Excessive wear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16		*	Electrical Apparatus	Deterioration of wiring, worn or dirty controls, poor connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Wire Rope/Chain Inspection Checklist

Item	Inspection Frequency: * = required		Part of Crane/Hoist to be Inspected	Inspect for:	Equipment Condition:		
	Frequent (once per month)	Periodic (longer than 6 months)			OK	Faulty	N/A
1	*	*	Reduction in diameter	Remove wire rope from service if reduction from nominal diameter is greater than 5%.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	*	*	Broken wires	4 broken wires in 1 strand, or 12 broken wires in all strands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	*	*	Flat spots	On outer wires where wires <2/3 normal thickness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	*	*	Distortion – Core failure	Severe kinking, crushing bird caging, displaced wires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	*	*	Chain links Wear/distorted	Gouges, nicks, corrosion, weld spatter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	*	*	Chain links stretched	Chain length > 1.5 – 2.5 % longer (powered versus manual) than unused	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	*	*	Heat damage	From any cause	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	*	*	Wires at end connections	Corroded or broken wires at end connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	*	*	End connections	Corroded, cracked, bent, worn or improperly applied end connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	*	*	Wire rope/chain operation	Not noisy; no binding and feeds smoothly; chains are lubricated per original equipment manufacturer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspector notes:

Note: Any deficiencies should result in taking the crane out of service and the crane should not resume service until the deficiencies are addressed. Keep all records on file for 1 year after inspection date.

# Inspection Log

[illegible]