



Inspection Checklist for Wire Rope and Chain Hoists

| Requirements | | | | | | | |
|--|---|-------------|--------|--|--|--|--|
| <p>A. Operators must perform a pre-use inspection (once per shift) for the items listed below.</p> <p>B. Any equipment found to be unsatisfactory must be removed from service.</p> <p>C. Operators must notify the equipment custodian, who will submit a Facilities service request to the crane inspector. Continued use may be permitted if authorized by the crane inspector in notes/comments.</p> | | | | | | | |
| Component | Inspection Criterion | Inspector → | Date → | | | | |
| Main Disconnect | Verify proper operation of main disconnect switch. | | | | | | |
| Emergency Stop | Verify proper operation of emergency stop switch. | | | | | | |
| Members | Inspect for bent or damaged members, loose connection hardware, guards and cracked welds. | | | | | | |
| Shaft/Couplings | Inspect for evidence of damage, misalignment, leaking seals, loose keys, coupling bolts, and covers. Inspect for vibration, cuts, nicks, loose or worn keyways, misalignment, wear, loose bolts, loose bearing caps and proper lubrication. | | | | | | |
| Gears/Cases | Inspect for damage or worn gears, for evidence of misalignment or loose keys, and for proper lubrication. Inspect for evidence of oil leakage, bearing damage, overheating, and abnormal wear. Inspect for worn teeth, loose components, keys, guards, covers, proper lubrication and levels. | | | | | | |
| Brakes | Inspect for wear, linkage, pins, cams, springs, linings, smoothness or drum and disc clearance. Inspect for proper solenoid air gap, loose core lamination, delay in brake release. Check hydraulic levels. | | | | | | |
| Sheaves | Inspect for wear, damage, sheave groove radius, worn bushing, bearing, pins, lock, bars, bolts, lubrication lines and fittings. | | | | | | |
| Load Brakes | Inspect for proper lubrication, oil leaks, proper operation, condition of screw threads, cams, friction plates, peened ratchets, proper clearance between friction plates. | | | | | | |
| Load Hook/Block | Inspect for damage, wear, mousing device, hook swivel, wear to sheaves, plates, loose pins, bolts, guards, capacity marking, drip pans and gaskets. | | | | | | |
| Load Cable | Inspect wire rope, sockets, swivels, trunnions, connection, check for broken wires, strand and lubrication. Check for 10% or less reduction in size, check for corrosion, kinks, crushing, dogleg, bird caging, protruding core, cable clamps and proper lubrication. Inspect for wire rope tight on drum. Inspect rope guides for wear, adjustment and proper operation. | | | | | | |
| Chains | Inspect for excessive wear of sprockets and chain stretch, visual for nicks, corrosion, gouges, distortion and excessive wear. | | | | | | |
| Motor (s) | Inspect for damage, bearing noise, vibration, sparks, clean line of commutator and brush wear. Check mount bolts. Check for overheating, insulation, motor leads and loose connections. | | | | | | |
| Wiring | Inspect for damage insulation, evidence of overheating, loose connections, proper sizing, all moisture or water tight fittings. | | | | | | |
| Load Drum | Inspect for excessive wear, crack in grooves, sharp ridges, drum bearings, excessive noises, vibration, lubrication and proper cable seating. | | | | | | |
| Capacity Signs | Inspect for mount bolts, bracket damage, check for proper ratings and existence of same. | | | | | | |
| Warning Devices | Inspect for warning tags and proper operation of sirens, horns, bells and lights. Check all switches and wiring. | | | | | | |
| Lighting System | Check fixtures for adequate support, proper location, damage, overheating, broken sockets, lenses and switches for operation, missing parts, covers, raceway and junction boxes. | | | | | | |
| Filtering System | Inspect for proper lubrication level, cleanliness and distribution of lubrication in system. Inspect for clean filter. | | | | | | |
| Below the Hook Attachments | Inspect for excess noise, vibration, leaking oil seals, sprocket, chains, worn keys, couplings, guards, covers, collector rings, wiring, proper lubrication, inspect hook pins, swivels and sheaves, check for proper capacity ratings. | | | | | | |
| Hoist Speeds and Holding | Inspect for proper operation of variable or multiple speeds and high speed and low speed limit switches. | | | | | | |
| Hoist Travel Limit Switches, Hook Height | Inspect for proper operation of high speed and low speed travel limit switches. Verify hook height and hook to floor distances. | | | | | | |
| Safety Latch | Verify proper operation of hook safety latch. | | | | | | |