

Overhead Crane and Hoist Inspection Requirements
as per
American National Standard ASME B30.17-2006

Section “17-2.1 Inspection”, states:

17 -2.1.1 Inspection Classification

(a) Initial Inspection

New, reinstalled, altered, repaired, and modified cranes ***shall**** be inspected prior to initial use.

Inspection of altered, repaired, and modified cranes may be limited to the components, and related functions, that have been altered, repaired, or modified, as determined by a qualified person**.

(b) Inspection Intervals

Inspection procedures for cranes and hoists in regular service are divided into two general classifications based on how often the inspections ***should****** be performed.

The inspection frequency is dependent upon the crane usage and the degree to which its critical components are exposed to wear, deterioration, or malfunction.

The two classifications are called out as frequent and periodic, with their respective inspection intervals defined below.

(1) Frequent

Visual examinations conducted by the operator or other designated person**** as follows:

- (a) Normal service - Once a month
- (b) Heavy service - Once a week to once a month
- (c) Severe service - Once a shift/day to once a week

Note: Written records for these inspections are not required, but are recommended

(2) Periodic

A complete visual inspection of the equipment ***shall**** be performed by a designated person**** as follows:

- (a) Normal service - Once a year
- (b) Heavy service - Once a year
- (c) Severe service - Once a quarter

Note: Written records for these inspections are required and are to be kept onsite for future reference.

17-2.1.2 Frequent Inspection

- (a) Frequent inspections ***shall**** include all visual and operational observations made during the inspection.
- (b) A designated person***** ***shall**** determine whether these observations constitute a hazard and if a more in depth inspection of same is required.
- (c) The following items ***shall**** be inspected:
 - (1) All operating components and functions for proper operation and adjustment or any unusual sounds.
 - (2) Any hoist upper limit device(s) as per [ASME B30.16](#)
 - (3) All tanks, valves, pumps, supply lines and other parts of an air or hydraulic system for wear or leaks.
 - (4) Load hook(s) and hook latches as per [ASME B30.10](#).
 - (5) All hoist mechanisms and functions in accordance with [ASME B30.16](#).

17-2.1.3 Periodic Inspection

- (a) A designated person***** ***shall**** determine if conditions found during the inspection represent a hazard and if disassembly of any individual component or assembly is required for additional inspection and evaluation.
- (b) The inspection ***shall**** include the items listed above in section 17-2.1.2(c) and the following items, where applicable:
 - (1) Deformed, cracked, or corroded components.
 - (2) Loose or missing fasteners.
 - (3) Cracked / worn sheaves and drums.
 - (4) Worn, cracked, or distorted parts, including but not limited to, pins, bearings, wheels, shafts, gears, rollers, locking and clamping devices, bumpers, and stops.
 - (5) Heavy wear in the braking systems.
 - (6) Extreme wear in the horizontal drive trains.
 - (7) Failures or fatigue in the drive control systems.
 - (8) Travel indicators for proper direction control.
 - (9) Proper operation of motion limit devices that interrupt power or cause a warning to be activated for proper performance. Each motion shall be operated at minimum, interim and maximum speeds with no load on the crane.
 - (10) Hoist(s) in accordance with [ASME B30.16](#)

17-2.7.4 Cranes Not in Regular Service

- (a) A crane that is used infrequently and may have been idle for a period of one month or more, but less than one year, ***shall**** be completely inspected by a qualified person** before being placed into service as per Section 17-2.1.2.
- (b) A crane that is used infrequently and may have been idle for a period of one year or more, ***shall**** be completely inspected by a qualified person** before being placed into service as per above Section 17-2.1.3.

17-2.1.5 Inspection Records

Detailed, dated inspection reports on all overhead lifting equipment, accessories and associated system parts and components, as partially noted in above Section 17-2.1.3 and [ASME B30](#), *shall** be prepared, delivered and signed by both the crane inspector and an end user designated person****. These reports *shall** be kept by the end user, stored onsite and made available upon demand by the appropriate authority.

(*) (**) (***) (****) See [Crane Buzz “Terminology” page](#) for definitions of these references