

HOOK CHECKS ARE ESSENTIAL FOR A SAFE LIFT.

ASME B30.10 requires that all hooks used for rigging be inspected throughout daily use, as well as periodically by a qualified individual. If any deficiencies are found during hook checks, the hook must be immediately removed from service until approved by a qualified person.

Damaged hooks can fail, causing catastrophic load drops. Regularly inspecting the hook used in your lift is essential for the safety of lift operators, and helps to prevent the expensive property damage that can result from dropped loads.

Follow the steps below before each time you use a hook in your lift. Be sure to follow ASME criteria for periodic hook inspection by a qualified person: inspections should be yearly for hooks used in normal service, semiannual for heavy service, and quarterly for severe service.

REMEMBER TO CHECK YOUR LATCH KIT!

Make sure latch, bolts, and pins are secure and lock properly to the hook.



1. CHECK FOR CUTS, CRACKS AND GOUGES & ENSURE THERE IS NOT MORE THAN 10% WEAR.

Check for nicks, cracks, and gouges in the surface of the hook. Any crack that you can fit a fingernail into is cause to remove the hook from service.

Look for areas on the hook that are excessively worn or corroded. Any area that has been worn down to less than 90% of its original diameter means that the hook must be removed from service.

Some defections can't be detected with the naked eye.

For this reason, hooks should be disassembled and tested with magnetic particle or dye penetrant by a qualified person during periodic inspections.



2. CHECK THAT THE HOOK HAS NOT BEEN STRETCHED BY MORE THAN 5%.

Hook deformation can occur when hooks are overloaded or side loaded, or with other errors in rigging techniques.

During regular pre-lift hook checks, look for visible stretching of the hook bill.

During periodic hook inspections, measure the throat opening of the hook. If it is more than 5% larger than the original dimensions, the hook should be removed from service.

Crosby® hooks offer Quic-Check® Deformation Indicators to make this check easy: two marks are embossed on the hook indicating where to measure to detect stretching.



3. CHECK FOR ANY TIP TWISTS FROM OVERLOADING OR SIDE-LOADING.

Side loading or overloading can also cause the tip of the hook to twist. This can both weaken the hook and create surfaces that synthetic slings could catch on.

If the tip of a hook is twisted, as per ASME B30.10, the hook must be removed from service.

If a swivel hook is being used, check that the hook swivels freely when not under a load.

Swivel hooks may benefit from regular lubrication to ensure proper swiveling function and to prevent twisting of the hook tip.



4. CHECK FOR EVIDENCE OF HEAT DAMAGE LIKE BURNS OR WELD SPLATTERS.

Excessive exposure to heat can drastically reduce the lifting capacity of hooks, which can lead to sudden failure.

Hooks that are used at temperatures above 400°F should be inspected and approved by a qualified person before continuing use.

A qualified person should also be consulted before and after using a hook in a chemically active environment (acidic or alkaline liquids or fumes).

If burns or weld splatters are visible, or if there is evidence of arc strikes, immediately remove the hook from service.

