

LIFTING & RIGGING SAFETY

TALK SAFETY TO ME
TOOLBOX TALKS

Talking Points

What goes up, must come down. It seems like an easy concept, but lifting and rigging injuries continue to happen in workplaces because people forget some basic safety items when doing a task that they complete often – like rigging and lifting. Inspect rigging before every lift. Damaged rigging can fail without warning, resulting in dropped loads, equipment damage, and serious injuries.

What to Inspect:

• **Slings**
Check for cuts, tears, excessive wear, broken/crushed/kinked or bird-caged wires, chemical or heat damage, and missing or illegible identification tags.

• **Shackles**
Check for bent, cracked, or damaged bodies, damaged threads, missing pins, signs of overloading, and missing or illegible identification tags.

• **Hooks**
Check for cracks, twisting or bending, excessive throat opening, missing safety latches, and missing or illegible identification tags.

• **Chain Slings**
Check for bent, stretched, or damaged links, excessive wear, signs of welding or unauthorized repairs, and missing or illegible identification tags.

Remember: If you aren't sure whether a piece of rigging is safe, remove it from service and have it inspected by a qualified person.

Understand the load – even good rigging and cranes can fail if the load is rigged incorrectly.

Safety Tips

- Know the load weight – follow rigging WLLs (Working Load Limit).
- Know the load's center of gravity – it's not always the middle of the load.
- Consider sling angles – tension is the outward forces of the load. Understand exactly the amount of weight your rigging is experiences. Remember - Wider sling angles are generally safer because they reduce tension on the sling legs.
- Balance the load - lift the load a few inches first to test balance and security.
- Protect rigging – use edge protectors when lifting loads with sharp edges.
- Understand the load factors – path of the load, weather, surroundings, load drop-off configuration and weight capacity, etc.

Common Hazards of Overhead Lifting

- Load and crane swing
- Rigging failure
- Objects falling from the load – falling load
- Hands and body parts becoming trapped between the load and other objects.
- Workers walking or standing under the load.
- Unstable loads – shifting loads

No load is so important that you cannot take the time to inspect rigging, plan the lift, and know the weight of the load.

Review Questions

1. Why is it important that rigging equipment has a readable identification tag?
2. What defects would you look for on a hook before using it?
3. Why is knowing the load weight critical before a lift?
4. How do sling angles affect the load on the sling?
5. Why should workers never stand beneath a suspended load?
6. What is meant by being in the "line of fire" during a lift?
7. Think about the last lift you were involved with. What was the biggest hazard, and how was it controlled?