

Hoisting Operations

Oil and gas workers are often struck by swinging equipment as it is being hoisted over the rig floor. The tongs and spinning chains used to make connections can strike workers. Don't underestimate the power that even a slow-moving swinging load can have on a person's body.



Rigging and Slings:

Rigging and slinging should be considered a system, as each component (hook, shackle, cable, or chain) makes up the system. Workers should take care when using rigging and slings. The rating of the shackles utilized should be equal to or greater than the rating of the slings. Each shackle and sling should be individually load-stamped and certified. Only shackles and sling hooks that are load rated by their manufacturer, with a rating appropriate for the load, should be used.

Each day before being used, all slings, fastenings and attachments should be inspected for damage or defects. Damaged or defective slings should be removed from service. A system of periodic inspection should be established to assure that any deformation or elongation in the shackles and sling hooks does not exceed the manufacturers' recommendations.

Below are some basic inspection and operating practices for slings:

- Shackles should not be side loaded.
- Care should be taken that the safe working load of a sling is not exceeded.
- Select a sling with a rated capacity equal to or greater than the intended load weight.
- When lifting an object, proper lifting device(s) and rigging procedures should be followed.
- Inspect slings prior to each use and examine closely for damage.
- Provide suitable protection from sharp edges.
- Avoid kinks, loops, or twists in the legs of the sling.
- Keep hands, fingers, feet, and body parts, from between the load line or sling and the load.
- Do not attempt to guide a load with your hands on the sling.
- The maximum angle between two legs of slings should not exceed 90 degrees. The wider the angle between legs of a sling, the more pressure is put on the sling.
- Avoid shock loading. Start the lift slowly to avoid unnecessarily stressing or shocking the sling or lifting device.
- Block up the load to allow space to remove the sling. Do not pull slings from under a load when the load is resting on the sling.
- Do not shorten a sling by knotting or twisting.
- Eyes in slings should not be formed by wire rope clips or knots.
- Keep wire rope slings well lubricated to prevent corrosion. Use the manufacturers' recommended lubricants.
- Synthetic slings that do not meet standard requirements should not be used until repaired by a sling manufacturer or equivalent entity. If not repairable, destroy them.

Check for the following defects on synthetic web slings and if found the sling should be removed from service:

- Acid or caustic burn; melting or charring of any part of the sling.
- Snags, punctures, tears, or cuts.
- Broken or worn stitches.
- Distortion of fittings.