



072: Rigging and Slings

Importance

Each year, too many people who oversimplify or underestimate the value of proper rigging lose fingers, toes, hands, feet and, in some cases, their lives. Inadequate rigging also damages loads and anything in their path.

Hitches

You use a sling to make a hitch, which is what holds the load to the rest of the rigging.

The three basic kinds of hitches are basket, choker, and vertical.

The basket hitch requires an extra hook. It cradles, rather than pinches, the load.

Use the choker to lift cylindrical items that need extra sling adhesion and can take the force generated by their own weight. An example is a conduit bundle.

If a load has a lifting hook, you can use a vertical hitch to lift it.

Slings

Slings come in a wide range of lifting capacities, weaves, and materials.

Before using a sling, inspect the sling body and the seam of each eye. If a sling shows wear, replace it.

The four basic types of slings are the straight eye, reverse eye, endless, and metal triangle.

The straight eye is also called eye-and-eye, and is general-purpose. Avoid using it for the vertical hitch.

The reverse eye is general-purpose. Because the eyes are reversed, you should use this sling for making the choker hitch. Avoid using it for the vertical hitch.

Think of a no-eye sling. That's what the endless sling is. It can provide more strength than an eyed sling, and using it is trickier.

A metal triangle, or plate hardware, sling helps extend the life of a sling.

A sling may use a metal triangle on one end only, in which case it works well in a choker hitch used with lifting hook.

A sling may use a metal triangle on each end, making it ideal for a basket hitch but worthless as a choke hitch.

Slings vs. loads

To determine if a given sling can lift the intended load, calculate the maximum lifting angle the sling will experience in the intended lift.

Use the chart that came with the sling to see its lifting capacity for each angle.

The lifting capacity also applies when you use a sling to hold a load in place.

Remember, the lifting capacity decreases as the included angle increases.

Lines

Avoid using fiber rope on pulls that aren't straight. Pad all sharp corners.

Discussion leader duties for this session:

Obtain a sling to demonstrate making a hitch during the discussion portion.

What this Safety Talk covers:

Rigging dangers and precautions.

Discussion notes :

