

# Materials Handling

## Materials Handling - Rigging or Sling Hitches

### On this page

[How should you use a vertical hitch?](#)

[How should you use basket hitches?](#)

[How should you use a turning hitch?](#)

[How should you use bridle hitches?](#)

[How should you use choker hitches?](#)

[How does the angle of hoisting affects a sling load limit?](#)

---

### How should you use a vertical hitch?

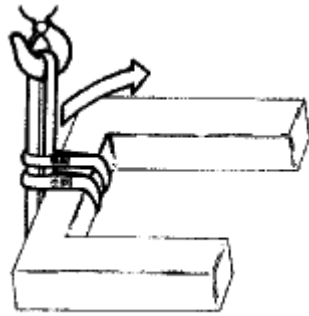
- In most cases use more than one sling. A single rope sling load tends to rotate in a twisting action that unwinds cables causing them to weaken.
- Do not use for lifting loose materials, long or unbalanced loads.



---

### How should you use a turning hitch?

- Use a doubled choker to turn loads.
- Place both sling eyes on top of the load pointing in the direction opposite to the direction of the turn. This sling will remain tight while the load is turning.
- Never use a basket hitch to turn a load.

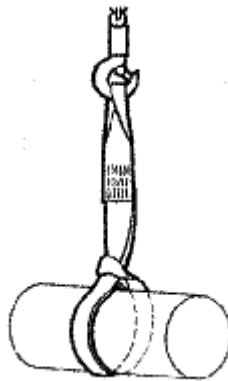


---

## How should you use choker hitches?

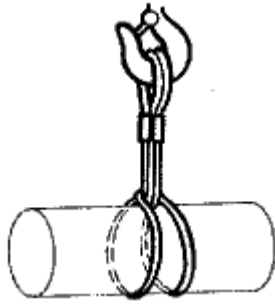
### Choker hitch

- The sling tightens on a load as it is lifted.
- Do not use on loose bundles.
- Use choker hitches at 75% or less of rated sling capacity.
- Use slings that are long enough so that the choker hitch is effective and the "grip" is on the webbing.



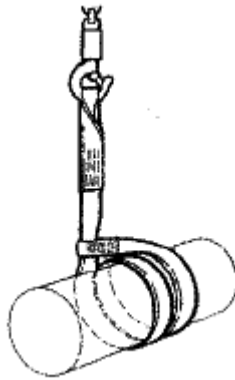
### Doubled choker hitch

- Provides more contact area to secure a load.



## Double Wrap Choker Hitch

- This hitch compresses the load and prevents it from slipping out of the sling.
- Where overhead space is limited, a double wrapped choker hitch is acceptable.

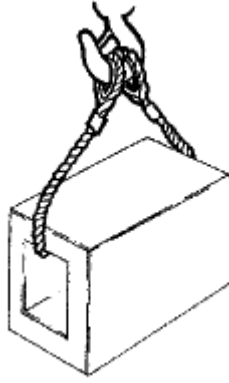


---

## How should you use basket hitches?

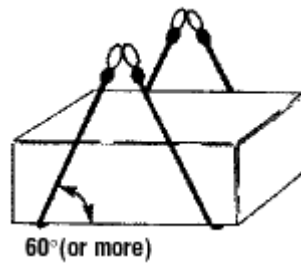
### Basket hitches

- Provide relatively good control and eliminate the tendency of the load to twist, compared with a vertical hitch.
- Do not use basket hitches with a load that is difficult to balance.



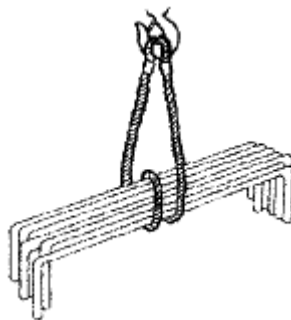
## Double basket hitches

- Balance loads by keeping slings apart.
- Prevent sling slippage by keeping the angle between the load and sling  $60^\circ$  or more.



## Double Wrap Basket Hitches

- Provide more contact for handling loose material and pipe.
- Tend to draw the load together.

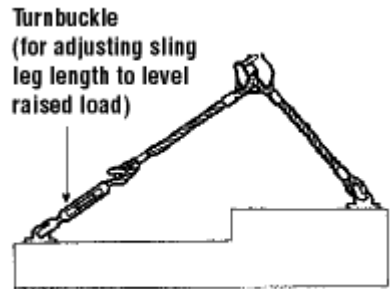


---

## How should you use bridle hitches?

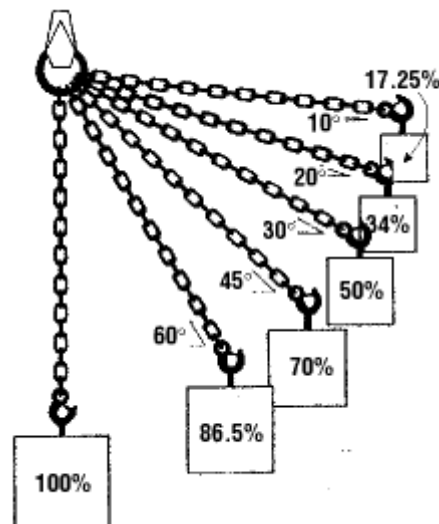
### Bridle hitches

- Are made of 2, 3 or 4 single leg hitches.
- Are used for hoisting an object that has lifting lugs or attachments.
- Position the hook over the centre of gravity of the load.
- Adjust sling leg lengths with turnbuckles to level raised load.
- Check each sling leg angle to ensure sling is not overloaded.



## How does the angle of hoisting affects a sling load limit?

- The angle affects the working load limit. The smaller the angle, the less load a sling can carry.



Fact sheet last revised: 2018-09-17

## Disclaimer

Although every effort is made to ensure the accuracy, currency and completeness of the information, CCOHS does not guarantee, warrant, represent or undertake that the information provided is correct, accurate or current. CCOHS is not liable for any loss, claim, or demand arising directly or indirectly from any use or reliance upon the information.