

# Gin wheels or pulley wheels

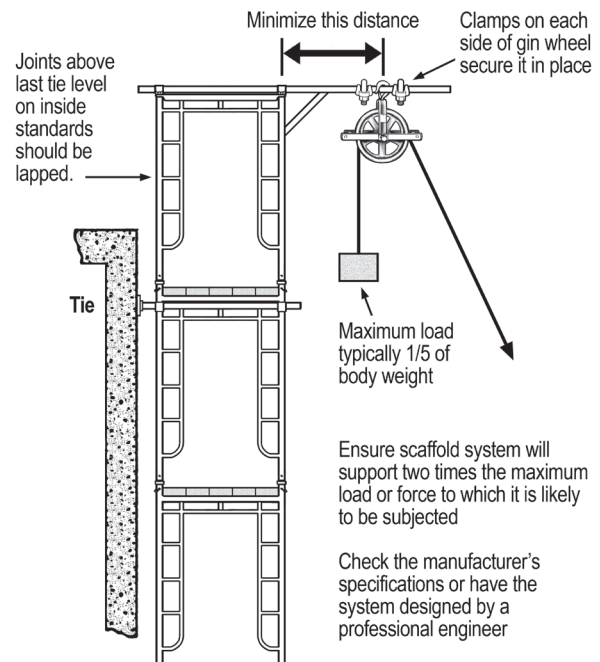
## Explain dangers

Using a gin or pulley wheel is a low-cost and convenient way of raising or lowering a load. However, these are some risks associated with using gin or pulley wheels:

- A hoisting rope that does not have a proper safety hook or knots at the end.
- A hoisting rope that is worn and needs to be removed from service.
- A load that exceeds the weight capacity of the components or the ability of workers to lift it.
- A load is not secured properly.
- A bucket or load that strikes the scaffold or building, causing the load to tip and fall.

## Identify controls

- Inspect the hoisting equipment and rope before each use. When not in use, store the rope so that it is protected from exposure to rain, snow, and UV radiation from the sun.
- Set up the gin wheel according to the manufacturer's instructions.
- Make sure the gin wheel and the rope are rated for the load you will be hoisting.
- When lifting liquid, cover the bucket so the contents do not spill.
- Always rope off the area below the gin wheel and never stand directly below the load (O. Reg. 213/91, s. 103).
- Whenever possible, arrange for workers at ground level to lift the load. When lifting, do not stand under the load.
- Always use gloves when working with a gin wheel to prevent rope burn.
- Make sure the rope is the correct diameter for the size of the gin wheel.
- Only use a gin wheel with a working safety catch on the mounting hook to prevent the wheel from detaching.
- If proper hooks are not available, use the appropriate knots.



### Proper set-up of a gin wheel

- Mount the gin wheel on a safe work platform that is above the standing arm's length of the worker who will be receiving the load. The load itself should be received no higher than the worker's shoulder height.
- Restrict loads to one-fifth of your body weight and watch for excessive side loading.
- Make sure that workers who are receiving the load (at heights) use proper fall protection.
- Remember that, if two or more workers are lifting the load, one worker should be giving instructions.
- Use slow, steady pulls to prevent MSDs

## Demonstrate

Ask your crew to describe any problems they have had with:

- Handling a gin wheel
- Making the appropriate knots
- Using a gin wheel with missing or damaged parts

Refer to Chapter 24: Rigging in IHSA's **Construction health and safety manual (M029)** for more info on knots and hitches.