Hoisting Safety Meeting Kit

What’s At Stake

Hoisting is used to lift and lower loads using a drum or wheel with ropes or chains wrapped around it. Hoists can be powered manually, electrically, or pneumatically.

What’s the Danger

HOISTING SAFETY SNAPSHOT

Only workers who have been trained in the proper use of hoists should be allowed to operate them. The lifting capacity of the hoist must be clearly marked and visible to the operator and cage-controlled hoists must be equipped with effective warning devices. Before operation, operators should check that the hoist chains or ropes are of sufficient strength and length to safely lift or otherwise handle the load. On a chain hoist, they should make sure the hook has a safety clip so that if the chain is given slack the hook won’t come loose. The oil level on hydraulic hoists should also be periodically checked. Operators should understand that they are prohibited from carrying loads over people and any hoist malfunction should be reported to their supervisor immediately.

HOISTING EQUIPMENT HAZARDS

- Workers may be crushed by moving objects or falling loads when vehicles or equipment aren’t properly secured
- Hoists may tip and fall when fixation bases aren’t properly secured, or because of imbalanced loads
- Personnel may fall from hoisting platforms or be struck when the hoisting platform moves
- Workers may experience musculoskeletal damage related to force exertions, poor ergonomic postures, and/or repetitive work hazards
- Workers may come into contact with overhead electrical

cables and be electrocuted

When a hoist or load inadvertently collides with another object or stationary structure, it can swing wildly, cause severe impacts, or fall into an unsafe area. The accident may not only hurt the workers operating the equipment, but it can also hurt workers nearby on board a ship, vessel, dock, or oil or natural gas platform. Workers in these conditions can be trapped, struck, crushed, or knocked off the vessel by an inbound load or lifting equipment.

A hoist should be strong and stable, and equipped with the suitable ropes and fittings, to ensure the safety of employees using it and of those working in the vicinity. Like any other piece of equipment, there are a number of safety hazards associated with their use. Some examples are:

- Being struck by items being hoisted
- Contact with electrical cables
- Collapse of unstable hoists

HOW TO PROTECT YOURSELF

HOW TO USE A MATERIALS HOIST SAFELY

- Know the safe load limit of the hoist. Do not exceed.
- Keep wire ropes and chains lubricated.
- Hoist from directly over the load. If not centered, the load may swing when lifted.
- Hang hoists solidly in the highest part of the hook area. Rigged this way, the hook support is directly in line with the hook shank.
- Lever operated hoists can be used to pull in any direction, but a straight-line pull must be maintained. Side pulling or lifting increases wear and sets up dangerous stress levels on hoist parts. Only one person should pull on hand, chain, and lever hoists.
- When loading the lower hook, place the load directly in line with the hook shank. Loaded this way, the load chain makes a straight line from hook shank to hook shank.

- Stand completely clear of the load.
- Seat the load properly in the hook.
- Move hoist controls smoothly. Avoid abrupt, jerky movements of the load. Remove slack from the sling and hoisting ropes before lifting the load.
- Remove all loose materials, parts, blocking and packing from the load before starting the lift.
- Make sure everyone is away from the load before starting to hoist.

WHAT TO AVOID WHEN USING MATERIAL HOISTS

- Do not use hoisting equipment for lifting people.
- Do not pass a load over workers.
- Do not tip a load. The load is unstable and harms the hook and hoist.
- Do not insert the point of the hook in a link of the chain.
- Do not hammer a sling into place.
- Do not leave slings dangling from the load hook. Place sling hooks on the sling ring when carrying slings.
- Do not raise loads higher than necessary to clear objects.
- Do not exceed a hoist load limit.
- Do not leave suspended loads unattended.

INSPECT OF THE MATERIALS HOISTS

- Daily – Inspect hooks, ropes, brakes and limit switches for wear and damage.
- Before lifting a load – Check the upper and lower hooks to see that they swivel. Replace any worn, damaged, or corroded chain or wire rope immediately. Tag any defective chain or rope and remove from service.
- Schedule a detailed inspection of all hoists.
- Follow the manufacturers' recommended maintenance schedules.
- Replace items not operating properly. Tag defective items and remove from service.

A Competent Signaller – Selection

Designate a competent employee to be a signaller – to direct, by means of visual or auditory signals, the safe movement and

operation of a hoisting apparatus by an operator.

FINAL WORD

To operate a hoist, you must be properly trained. Know the rated capacity of your hoist; it should be clearly labeled on the equipment. Read the manufacturer’s operating instructions and warnings. Get training on how to use the hoist machine and how to properly rig and safely maneuver loads. Perform regular maintenance on the hoist and lifting rope/chain.