

Contributor:





Description

- 1. Working safely with lifting and loading operations requires competent workers, the right equipment, a safe plan of action and proper supervision every time.
- Manual handling training starts the awareness journey for every worker. Know your limitations, know your options and have the confidence to act properly. Banksman training, Slinger / Signaler training, lifting equipment operations training including construction skills (CSCS) Training, Appointed persons training, Lift Supervisor and Crane Supervisor training as well as Site Supervisor and Project Management Training are required.
- 3. All lifting and loading operations carry inherent risks requiring the identification of hazards, the quantification or evaluation of that risks and the implementation of control measures to address those potential dangers.
- 4. Control measures must include all necessary cooperation and collaboration to coordinate between all interested parties which could include Ground operators, machine operators and transport workers, site and security workers, workers close by the operations and members of the public nearby.
- 5. Supervision is having the people, equipment and plan ready to go, having an alternate considered when confronted with an anomaly and have preparations and responses in place in case of an emergency.
- 6. Now, we are ready to go.

Know your Lifting and Loading Hazards

- 1. Struck by falling object.
- 2. Struck by moving plant and equipment.
- 3. Slip trip and fall from height.
- 4. Slip, trip and fall on same level.
- 5. Manual handling injury including laceration, muscle strain and hand and / or foot contusion.

Know your Lifting Gear & Accessories

Slings

- 1. Check Safe workload, SWL on sling against load to be lifted.
- 2. Rope slings need not be marked with the SWL, provided that a certificate of test is available and SWL is known.
- 3. Don't use fibre rope or wire slings for hot loads and keep them away from welding or flame-cutting operations
- 4. Ensure no broken ends in wires or chafing on fibre ropes.
- 5. Check condition of splices, rings, and thimbles on slings.
- 6. A sling doubled round a shackle has a SWL equivalent only to that of a single part of the rope.
- 7. Protect wire rope or nylon slings from sharp edges

Chains

- 1. Make sure chain in not kinked or twisted.
- 2. Don't shorten a chain by knotting it.
- 3. Never lengthen a chain by joining pieces together.
- 4. Don't lubricate chain slings oil can pick up abrasive materials such as sand or grit.
- 5. Don't expose chains to acids or corrosive substances.

Shackles

- 1. Use the right type of shackle for the job in hand.
- 2. Don't use any shackle which isn't marked with the SWL.
- 3. Check bow and pin for damage, destroy if doubtful.
- 4. Ensure pin is free, but not loose, in tapped hole.
- 5. When using a shackle with 'nut and bolt' pin, the pin should be free to rotate when nut is tight.

Hooks and Eyebolts

- 1. Check both hooks and eyebolts carefully for cracks, cuts, dents, and corrosion pits.
- 2. Swivel hooks should rotate freely.
- 3. Always use mouse hooks unless fitted with safety catch and make sure the catch operates freely.
- 4. Check center line of eye is central with threaded portion.
- 5. What checks should be carried out on hooks and eyebolts before using them?

A CHAIN IS ONLY AS STRONG AT ITS WEAKEST LINK - KNOW THE SWL OF ALL LIFTING GEAR

Performing Lifts Check list

Before Lifting

- 1. Wear a safety helmet and high-visibility clothing.
- 2. Ensure all lift Plans, RAMS and JSP are in place and communicated prior to the lifting activity.
- 3. Make sure you know the weight of the load to be lifted.
- 4. Ensure hooks are 'C' type or fitted with safety catch.
- 5. Ensure you can see crane driver if you can't, use radios.
- 6. Ensure radios are fully charged at start of shift.

During Lifting Operations

- 1. Use approved hand signals clearly and distinctly.
- 2. Protect wire ropes and slings from sharp edges of the load with soft wood or other suitable packing.
- 3. Ensure correct pin in shackle is used and screwed home.
- 4. Ensure hook is central to stop load swing when raised.
- 5. Ensure load is lifted off the ground and is free and correctly slung before hoisting.
- 6. Always use a guide rope to steady the load.
- 7. Stand well clear of load being lifted.
- 8. When the crane is in operation don't leave the area unless you are relieved by another signaler.
- 9. Warn crane operator of any obstructions to the load.
- 10. To avoid damage to lifting gear, loads should be landed on to timber or another suitable bearer.

Hazards

- 1. Never tie knots in chains to shorten them.
- 2. Riding on loads is strictly prohibited.
- 3. Don't use lifting gear for other purposes, e.g., towing.
- 4. Keep all persons not involved in lifting operations away from vicinity, especially children and the general public.

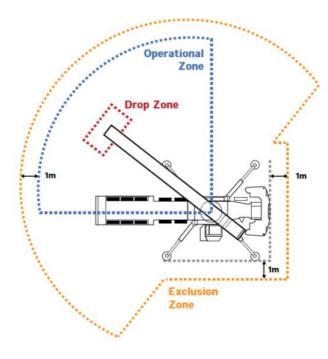


Lifting Operations – Use of Cranes

1. Exclusion zones must be established around lifting activities to prevent non-essential personnel entering the area and potentially being injured by falling objects. The size of the exclusion zone should be based on a risk assessment however, a general rule to use is that the exclusion zone should (at a minimum) be at least 1m outside the operating zone of the boom length. Where the exclusion zone impacts upon public areas suitable alternate access or traffic management must be established to maintain the exclusion zone.



The Slinger/Signaler is permitted in the operational zone and exclusion zone but never under the drop zone.



Lifting Operations – Exclusion Zone

1. Example of Physical Barriers options shown on the below diagram. Other examples could include traffic cones, warning signage, Heras fencing etc.

