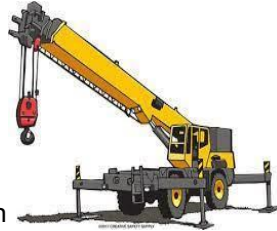


Introduction

Cranes are one of the most versatile, powerful and important pieces of equipment commonly found on construction sites. They can be used to accomplish a lot of heavy lifting tasks, saving the amount of time and energy spent on a project.



However, they can also be one of the most dangerous pieces of equipment on site. They lift heavy loads over large areas of a project site, require workers to perform work at great heights and pose the risk of electrocution.

Employees whose jobs involve working with and around cranes need to understand the hazards of moving parts and rigging of loads. Hazards can include:

- **Striking injuries** from moving equipment, raising or dropping loads
- **Crushing injuries** from equipment overturning, breaking or rigging failures
- **Falls** from performing work at heights
- **Electrocution** from contact with overhead power lines

There are many different types of cranes which play an important role in lifting heavy loads. No matter which piece of equipment is being used, below are some general safety rules for the maintenance and operation of cranes.

Equipment Maintenance

- Both the employer or contractor, and the supplier have a responsibility to ensure that every hoist, crane and lifting device, including all rigging, used or supplied for use at a place of employment, is designed, constructed, installed, maintained and operated to perform safely any task for which the equipment is used.
- Inspections must be completed and any defects properly repaired before the equipment is used.
- Structural components of the equipment must be working properly. If the equipment is not in good condition, worn out or overstressed, or if a cable, hook, or sling is overloaded, the load may drop.

Equipment Operators

- All competent crane operators must have successfully completed a training program that includes all of the elements set out in Table 13 of the Appendix of the *Occupational Health and Safety Regulations, 2020* - Minimum Training Requirements for Competent Operator of a Crane.
- Operators must ensure all safety system indicators are functioning properly and enabled at all times.
- Inspection and log books must be completed daily.
- Equipment must not be overloaded. Crane accidents have the potential to cause serious injuries or death, as well as major property damage if a load is dropped or if the crane overturns.
- Avoid lifting loads above workers or the public. Workers can be hit by a load dropped or suspended if working under or near a load. It is very important workers pay attention to crane operations, obey all warning signs and stay out of the way of moving parts.
- Electrocution is a deadly hazard with cranes. Before work is performed in the area, a site evaluation should be completed to identify and correct any hazards present. Power lines must be located, and barricades or signs should be posted to ensure a minimum distance is maintained.
- Report any unsafe acts, malfunctions or problems to your supervisor.



Applicable Legislation: *The Occupational Health and Safety Regulations, 2020, Part 13 Hoists, Cranes and Lifting Devices*