

Mobile crane requirements for planning and operation — Plan the lift, and lift to the plan

Every mobile crane lift is potentially hazardous and must be planned and carried out safely, according to the requirements of the *Workers Compensation Act* and Occupational Health and Safety Regulation.

The lift plan

Lift planning includes the identification, assessment, and control of all foreseeable site, crane, load, and environmental risks. The complexity of the lift will determine the amount of planning detail required.

Less complex lifts may only require a simple lift plan that confirms the crane configuration, its rated capacity, and load information. More complex lifts may require additional information on crane placement, load attachment points, rigging, soil condition, and specific site hazards.

Lift planning should include everyone involved with the lift, including the prime contractor, employer, supervisor, crane operator, and rigger.

Supervision

Lift supervisors must be familiar with mobile crane work and ensure workers are made aware of all known or reasonably foreseeable health and safety hazards. Workers must be informed, instructed, trained, and supervised in the safe operation of the mobile crane and lift plan details.

Operation

Mobile cranes can only be operated by workers who have a valid operator's certificate issued by a person acceptable to WorkSafeBC.



Mobile crane operators must be informed, instructed, and trained in the safe operation of the crane and must have demonstrated competency, including familiarity with the operating instructions.

Assembly/disassembly

Mobile crane assembly and disassembly can only be carried out by qualified workers who have the necessary information, instruction, and training to do so.

Documentation

Mobile crane operators and workers assembling and maintaining the crane must have access to the manufacturer's manual for the crane. The manual

Qualified person

According to the Regulation, qualified “means being knowledgeable of the work, the hazards involved and the means to control the hazards, by reason of education, training, experience or a combination thereof.”

must describe the approved methods of assembly, erection, dismantling, maintenance, inspection, and operation of the mobile crane. The crane must also be equipped with a load chart.

A record system log book must contain entries for each shift, signed by the crane operator. Each entry must report the results of the start-of-shift inspection and safety check, as well as any observed defects, operating difficulties, or need for maintenance occurring on the shift.

The log book must also contain entries — signed by the person responsible — for any tests, inspections, modifications, repairs, or maintenance on the equipment. Each entry must summarize the work done and indicate the status of the crane for further use.

Inspections

Before each shift — Ensure that crane operators inspect mobile cranes, including control and safety devices, before each work shift. Operators must keep records of inspections and maintenance, and report defects immediately to a supervisor.

Annual inspections — Ensure that the crane is thoroughly inspected at least once a year and certified as safe to use by a professional engineer. The crane must meet the manufacturer’s specifications and all other applicable design and safety standards.

Periodic inspections — Inspect the crane at the manufacturer’s recommended intervals and as per all applicable standards to ensure that crane components are functioning as intended.

Maintenance

Maintain mobile cranes as specified by the manufacturer or a professional engineer. All maintenance and repairs must be done by, or under the direct supervision, of a qualified person. Document all maintenance and repairs.

Ensure all modifications to the crane and its component parts are approved by the manufacturer or a professional engineer.

Other responsibilities

Prime contractors and employers must also ensure the following:

- Coordinate the movement and activities of all subcontractors.
- Ensure that effective traffic control is in place.
- Hold a pre-erection meeting and ensure that it is attended by everyone who needs to be there.

In the Regulation — Section 14.38(6), Safe lifting

If a crane or hoist is being operated at the same time and in the same location as other work activity, the employer or the prime contractor must organize and control the work of any persons who are not involved in that operation to ensure that the operation can be carried out safely.

Resources

- Hazard Alert poster 2013-03
www2.worksafebc.com/i/posters/pdfs/2013/ha_2013_03.pdf
- Hazard Alert poster 2011-02
www2.worksafebc.com/i/posters/pdfs/2011/ha_2011_02.pdf
- Hazard Alert poster 02-08
www2.worksafebc.com/i/posters/pdfs/2002/ha0208.pdf
- Hazard Alert poster 95-10
www2.worksafebc.com/i/posters/pdfs/1995/fatal9510.pdf