

Positive stop or limiting devices and multiple-overhead crane lifts

OHS information for employers and workers

This resource addresses the use of positive stop or limiting devices for overhead cranes and occupational health and safety (OHS) legislated requirements.

An employer must ensure that a crane operating on rails, tracks or trolleys



- (a) has a positive stop or limiting device on the crane or on the rails, tracks or trolleys to prevent it from overrunning safe limits or contacting other equipment that is on the same rail, track or trolley.

-Occupational Health and Safety Code, s. 95(a)

In this section, “contacting other equipment” means uncontrolled, unintended contact (a collision) that might upset or cause a load to swing, a crane to come off its rails, or a crane or its supporting structures to be damaged.

Preventing contact

Common devices used to prevent an overhead crane from contacting other equipment include:

- shock-absorbing rail stops
- rail-mounted rubber bumpers (not crane mounted)
- limit travel switches
- speed-limiting motion or proximity sensors mounted on the overhead crane that slow and stop the crane prior to making contact.

Rubber bumpers

While rubber bumpers are an acceptable means of protecting equipment, they are unacceptable as a positive stop or limiting device when mounted on the overhead crane.

When mounted on a crane, a rubber bumper is considered to be part of the crane and is not capable of preventing the crane from contacting other equipment.

Multiple-crane lifts

Section 95(a) of the Code is not meant to prevent a competent operator from performing a controlled, low-speed contact to set up and perform a lift where multiple cranes are needed.

Depending on the situation and equipment used, the limiting device may need to have its functions disabled to allow close contact or actual contact.

Before a limiting device is disabled, the employer must develop and implement written safe work procedures for this process.

- All workers affected must be trained in and follow the safe work procedures.
- The lifting equipment's pendant or control panel must be tagged to show that normal function of the limiting device has been disabled.
- Once the lifting operation is complete, the limiting device must be restored to normal function and the tag removed.
- When two or more overhead cranes are used to lift a load, one competent worker must be in charge of the operation.

Contact us

OHS Contact Centre

(Concerns, questions, report serious incidents)

Anywhere in Alberta

- 1-866-415-8690

Edmonton and surrounding area

- 780-415-8690

Deaf or hearing impaired

- 1-866-232-7215 (Alberta)
- 780-427-9999 (Edmonton)

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alberta.ca/report-potentially-serious-incidents.aspx

Report a mine or mine site incident online

alberta.ca/report-mine-or-mine-site-incidents.aspx

Website

alberta.ca/ohs

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