Safe handling when securing loads: High risk identification and guidance tool

The risks associated with equipment used to secure loads on trucks, such as gates, curtains and load tensioners, have been an on-going problem in the transport industry.

There is an unacceptable risk with the use of dogs and cheater bars. They can cause serious harm when they kick back and hit workers and increase the risk of shoulder and back strains. Eighty percent of workers report they have been injured or know of someone who has. Alternative equipment and restraint techniques are readily available.

This tool will help you identify musculoskeletal disorder risks and provides suggestions on how to manage them. It has examples that require high or sudden force, awkward postures, repetitive movement and hitting or being hit by objects, while:

* handling gates
* handling curtains
* placing lashings and corner protectors
* tensioning chains and webbing.

It also suggests controls which may reduce the chance of an injury.

This document only lists examples, and is not exhaustive. Businesses will need to assess what is reasonably practicable to control their loading and unloading risks at their own workplace.

# Handling gates

# High risk

🞏 Single worker manually removing or replacing gates between ground and truck height if gates weigh over 12kg or measure greater than 1.2m in height.

🞏 Worker manually removing or replacing gates at shoulder height or above.

🞏 Team of workers manually moving gates between ground and truck at or above shoulder height and gates are heavy, very tall or very wide.

🞏 Fitting a bent gate or a gate with bent pins.

🞏 Worker at risk of being struck, pinned or pinched when removing or replacing gates.

# Suggested control

🞏 Gate weight supported by straps or rollers by sliding, hinging/swing or suspension systems while being manually moved into place.

🞏 Gates are moved in and out of position manually from a solid platform between shoulder and knee height.

🞏 Routine inspections and maintenance of gates is carried out to reduce effort, e.g. by straightening gates and pins.

🞏 Small and medium sized gates are handled by two people.

🞏 Mechanical assistance is used to position gates. For example: a forklift.

🞏 Load rated side curtains (load rated curtains may be heavier though).

🞏 Gates are not used because another effective load restraint such as racking, chocking or flooring purpose built to contain the load is used.

Handling curtains

# High risk

🞏 Manually opening and closing side-curtains on trucks with hand above head height and/or behind the line of the body.

🞏 Walking backwards with a curtain.

🞏 Manually moving curtains forcibly along tracks and/or rollers that are poorly lubricated, poorly designed or damaged.

🞏 Manually moving curtains forcibly past a load resting against the curtain.

🞏 Securing buckles repetitively with forceful wrist/arm exertions or awkward wrist hand positions to close buckles.

🞏 Manually restraining curtains in windy conditions without restraints.

# Suggested control

🞏 Automatic curtains that are self-opening and closing.

🞏 Using an extension strap with handle, webbing and hook for improved pulling position.

🞏 Curtains with a track and rollers that have a plate with double bearings.

🞏 Curtain track and rollers are regularly maintained.

🞏 Using load tensioners that operate outside the curtains.

🞏 Safe system of work for loading/unloading in windy conditions.

🞏 Curtains with a securing system that does not involve buckles.

# Placing lashings and corner protectors

# High risk

🞏 Throwing chains, webbing or lashing over the load.

🞏 Climbing on the truck to place the chains, webbing, other lashings, tarpaulins or corner protectors over the load.

🞏 Other workers at risk of being struck and injured.

# Suggested control

🞏 Purpose built racking and chocking to eliminate the need for lashings.

🞏 Working from a platform ladder or elevating work platform.

🞏 Purpose-built lightweight extension pole, especially one that grips the lashing or corner protector to apply and remove lashing while standing on the ground.

🞏 Using a lead rope to throw and drag chains over the load.

🞏 Using a system designed for a Curtain-sider. E.g. Retracts the webbing straps to the roof of the trailer when not in use fuel.

# Tensioning chains and webbing

# High risk

🞏 Using fixed lever over-centre load binders (dogs) to tighten chain with or without using extension handles (cheater bar).

🞏 Using worn or damaged load binders or winches.

🞏 Rapidly tightening or loosening chains and webbing using a winch or hand ratchet load tensioner with awkward wrist postures or over shoulder height.

# Suggested control

🞏 Using highly geared manual or automatic winch.

🞏 Using purpose built load blocking containment systems e.g. pins, pegs, posts, racks, headboards or goose-neck on a drop deck trailer.

🞏 Rigid side trucks or load rated curtains with inward sloping floors.

🞏 Using webbing instead of chain. (Note: some types of webbing are not suitable for particular loads).

🞏 Using a turnbuckle or winch type tensioner instead of a dog.

🞏 Using a stable platform or stand so that the tensioner can be used between the shoulder and knee height.

🞏 Using winches that do not need repeated handle reinsertion to operate.

🞏 System of checks: Maintenance of chains and webbings.

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