Ergonomics and Manual Handling

06.02.07

– Manual handling

Stacking cartons on pallets >

This information bulletin provides information on ways of reducing manual handling injuries when stacking cartons onto pallets. It is particularly relevant for people who work in services to agriculture, warehouses, factories, shops and other workplaces where stacking pallets is part of the job.

What is manual handling?

When stacking cartons on pallets, manual handling means lifting, lowering, pushing, pulling, carrying, moving or holding cartons that are placed on or removed from pallets. Tasks associated with stacking cartons on pallets may also be associated with other manual handling risks such as stacking shelves or moving trolleys. These tasks are covered by other bulletins in this series. General information on manual handling can be found in NT WorkSafe information bulletin 06.02.01.

Preventing manual handling injuries

Manual handling tasks likely to be a risk to workers' health and safety should be identified and assessed in detail to determine the nature and the extent of the problems. Where a person's health and safety is at risk, solutions to the problems need to be found in order to minimise the risk.

The following general problems and suggested solutions are examples of how manual handling injuries may occur when stacking cartons or pallets and how these can be reduced.

Problems

Strain injuries may occur when stacking cartons on pallets, where:

- the load is lifted from the floor, or from below mid-thigh height;
- reaching above shoulder height when stacking cartons on pallets;
- there is too much twisting and bending when placing cartons on a pallet;
- excessive forward reaching is required when placing cartons on the far side of a pallet;
- the cartons are too heavy when other risk factors, such as the number of cartons to be moved or the distance moved, are taken into account; and
- the cartons are awkward to grasp due to their size and shape.

Solutions

Here are some ideas that may be suitable for your workplace. These examples provided may need to be used in combination with each other. Other risk control strategies, for example training, form part of any well thought out solution.

- Eliminate manual handling by using automatic carton stacking, vacuum suction, or hydraulic carton stacking.
- Raise the work height, use a platform with automatic height adjustment.
- Use scissor platforms or tables.
- Use swivel or tilt platforms.
- Talk to your customers or suppliers about the size, shape and weight of cartons and their contents.
- Reduce the weight of the carton.
- Limit the height of the stack of cartons.
- Where team lifting is necessary, ensure a safe procedure is agreed and followed.

Further information

National Code of Practice for the Prevention of Musculoskeletal Disorders from Performing Manual Tasks at Work

NT WorkSafe information bulletins Series 6 – Ergonomics and Manual Handling

ASCC Manual Tasks

NT WorkSafe >

GPO Box 1722

Darwin NT 0801

Telephone: 1800 019 115
Facsimile: (08) 8999 5141
Email: ntworksafe@nt.gov.au
Website: worksafe.nt.gov.au

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