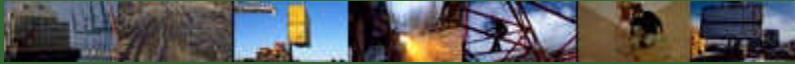




Safety Meeting Outline



SMO 03-0201

MATERIAL HANDLING TECHNIQUES - EXCESSIVE WEIGHTS AND FORCES

By SeaBright Insurance Loss Control

Manual material handling injuries are industry's most frequent accident source. Overall, this accounts for one-third of all accidents and can exceed 75% in some work operations. Workers handling materials of excessive weights or performing tasks that require excessive forces are a major cause of these injuries. Many times the sources can be easily corrected. Here are a few techniques, which could reduce the number of manual material handling injuries on your job.

Excessive Weights

The amount of weight workers can safely handle by themselves depends on many variables. Assuming the lifting and lowering portion of the task is performed correctly, studies have shown that the ideal weight ranges from 35 to 50 pounds, depending on whether the worker is female or male. The following are techniques you may be able to use to either reduce or eliminate the weight of the material you are attempting to handle.

- ◆ Reduce the weight of an object by reducing the size of the object itself. For example, both 50- and 90-pound bags of cement are available from suppliers. It's smart to order the lighter packaging. Reducing the weight of the container itself may also be possible. For example, a plastic tote pan is lighter than a steel tote pan.
- ◆ Reduce the number of objects to be lifted/lowered at one time and never handle several heavy objects at any one time.
- ◆ Handle a heavy object mechanically since this eliminates the lifting exposure for you altogether.
- ◆ Increase the weight so that it must be handled mechanically. This technique is known as unitizing or palletizing.

Excessive Forces

Excessive forces can be created during manual material handling tasks, and are not always recognized prior to doing the task. Examples of this are: a sudden jolt caused by stepping into a hole while carrying material; pushing or pulling a cart over a long distance; pushing or pulling a cart over a floor pitted with holes or bumps; or pushing poorly maintained equipment such as ungreased wheels or wheels with flat spots. All of these create excessive force that can result in a back strain or injury. Here are a couple of techniques that can reduce the forces involved in manually handling objects.

- ◆ Select and inspect the equipment you use. Use material handling aids such as handcarts and dollies with large diameter wheels. Inspect them regularly to ensure the equipment is in good condition. Prior to moving the load, look over the path of travel, checking to see that the surface is in good condition and free of debris or tripping hazards. Reduce the distance of the push or pull task by improving the workflow or layout of the work area.
- ◆ Push or pull smaller loads. Making more frequent trips with smaller loads will reduce the forces required for each load. Convert carrying tasks to push or pull tasks by using a hand truck or conveyor. If possible, convert pulling tasks to pushing tasks. Pushing material improves your ability to see your travel path and puts less strain on your back, since the weight of your body is against the cart.

What other ways can you think of that can reduce or eliminate the excessive weights or forces you may encounter in your job? A little pre-planning upfront will save time and pain in the long run.

Work smarter, not harder!



SAFETY MEETING AGENDA

DEPARTMENT/JOB SITE: _____ MEETING DATE: _____

1. **Open Meeting & Present safety topic:** _____
2. Read minutes from previous meeting.
3. **Persons present:**

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

4. **Old Business** – Status of previous recommendations. Discuss pending old business if any.
5. **Accidents** – Discuss accidents and near misses that have occurred since the last meeting. Brief summary of accidents to date by number and type. Note any trends. Discuss corrective action taken, or needed. Concentrate on accident causes to make everyone more aware.
6. **Inspection Reports** – Report on findings and recommendations of any inspection reports made since last meeting.
7. **New Business** – Solicit employee suggestions. Discuss new procedures, changes to company safety policy, etc.

TIME MEETING STARTED: _____ TIME FINISHED: _____

MEETING CHAIRED BY: _____ TITLE: _____