



Safety Tips Sheet No. 3: Safe Lifting Practices

This is the 3rd in a series of Safety Tips Sheets developed by the Crane, Hoist and Monorail Alliance concerning safe application and operation of moving loads.

Adopting these practices will help avoid workplace injuries and will increase the ability of a worker to safely and properly perform a job.

Guidelines for safe manual lifting: General guidelines are that no one person shall lift more than 35 pounds on a repetitive basis without some type of lift assist. However, this weight limit should be further reduced depending on:

- Force required to move a load (load and acceleration)
- Size and dimensions of the object
- Number of repetitions (frequency of lifting)
- Person's position in relation to the load (posture)

Safe Lifting Practices:

- **Do not** lift loads of more than 35 pounds without a lift assist
- **Do not** reach out, position the load close to your body
- **Do not** lift an item more than chest height
- Avoid high repetitions
- Avoid quick acceleration, do not jerk the load or twist your body
- When lifting do not over extend your back, bend your knees and concentrate lifting with your legs

Possible adjustments to the lifting operation: If the job requires that the load to be lifted and moved exceeds the guidelines for safe lifting, then a work place adjustment should be implemented. The possible adjustments could include:

- Change the size of the container to reduce the overall dimension and/or weight of the part
- Change the frequency of lifting by one person
- Rotate personnel or use additional personnel
- Change the position of the person with respect to the load
- Move the loads by pallet instead of individually
- Use material handling equipment to lift and transport the loads

Depending on the specific application, material handling equipment represents potential lifting solutions. The following equipment types provide manual, electric or air powered lift assists:

- Hoists and balancers
- Manipulators
- Enclosed track monorail and crane systems
- Patented track and overhead cranes systems
- Lift tables

For more information, visit the following websites: www.mhia.org/hmi, www.mhia.org/mma, or www.mhia.org/lmps.