

Material Handling

Mechanical Material Handling Devices

- Use mechanical devices when a task cannot be completed by hand.
- Using these devices can simplify the task, but machines also bring their own hazards to the operation.



Mechanical Material Handling Devices – Hand Trucks

- Other names for hand trucks:
 - Wheelbarrows
 - Dolly trucks
 - Two-wheeled hand trucks
- Hand trucks should be equipped with canvas, leather or rubber knuckle guards
 - Why?
 - To help prevent hand injuries.

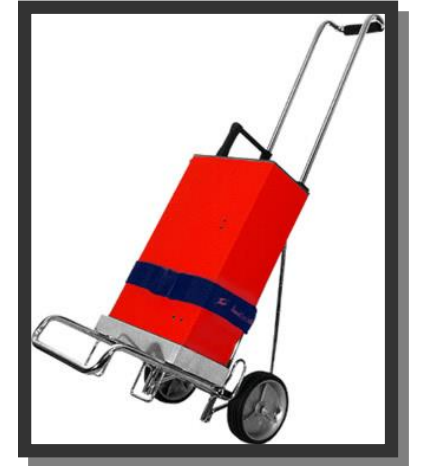


Mechanical Material Handling Devices – Hand Trucks

- When loading, the heavy objects should be below the lighter ones, and the load kept as low as possible.
 - Why?
 - To prevent tipping over
- The hand trucks should not be overloaded, and the load should not obstruct your view.

Hand Trucks

- Use proper lifting techniques when lifting a load.
- The operator should push and balance the truck always walking forward.
- The truck should not be held in place with your foot.
- Two-wheeled hand trucks should be equipped with brakes if used on inclined walkways.



Mechanical Material Handling Devices – Conveyors

Generally, conveyors used in industry are:

- Roller
- Belt
- Screw
- Bucket
- Chain
- Overhead trolley
- Portable
- Mobile
- Tow
- Assembly

Mechanical Material Handling Devices – Conveyors

- Moving parts should be guarded with wire mesh enclosures or railings.
- Rollers or pulleys at the ends of belt conveyors should be guarded to prevent fingers and hands from being drawn into pinch points.



Conveyors

- A shield, guard, or housing should enclose each end and all other areas at floor level where workers could come into contact with moving parts.
- Avoid riding on conveyors, except those that incorporate platforms and control rooms for operating personnel.

Conveyors

- Conveyors should have conveniently located warning devices and emergency stop controls.
- Turn off power and lock the switch during maintenance.



Hand Protection

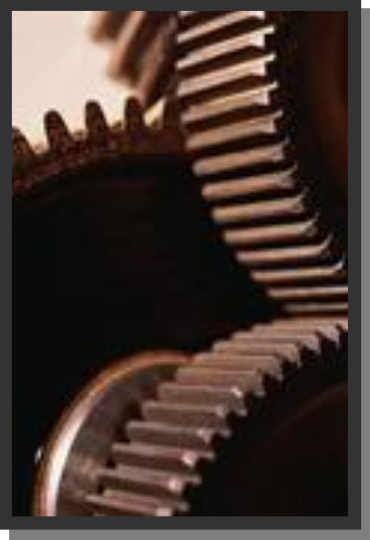
- Watch out for pinch points!
- Wear gloves that are approved by your supervisor for the work being done.
- Never work around moving machines while the guards are removed. This exposes your hands to pinch points.



Hand Protection

- Before lifting or handling objects, look for:
 - Splinters
 - Sharp edges
 - Anything else that could injure your hands
- Make sure you have the proper hand clearance when setting down loads or carrying loads through doors.
- Always wash your hands after you are exposed to chemicals.

Pinch Points



- Pinch points are areas where your hands can become trapped or mashed between two objects.
- Examples:
 - Operation point of a metal press
 - Area where a sprocket and chain come together
- Working around moving machines while the guards are down exposing your hands to pinch points.

Safe Lifting Summary Points

- Back injuries result in significant losses to both employees and employers each year.
- Training and common sense will prevent most back injuries.
- The back is not designed for lifting, so don't use it that way!
- Good health and exercise are a key factor in back safety programs.

Material Handling Summary Points

- Wear the appropriate hand protection.
- Watch out for pinch points.