

Safe Operating Procedure

(Revised 7/09)

CART AND HAND TRUCK SAFETY

(For assistance, please contact EHS at (402) 472-4925, or visit our web site at http://ehs.unl.edu/)

Manual material handling equipment, such as carts and hand trucks, are used for a variety of hauling operations and can make these operations safer. However, this equipment can present serious safety issues if not properly used or maintained. This SOP does not apply to use of fork trucks, tractors, platform lift trucks, motorized hand trucks, and other specialized industrial trucks powered by electric motors or internal combustion engines. These types of devices are subject to specific OSHA requirements on training and inspection. Refer to the EHS SOP, *Forklift/Powered Industrial Truck Safety*.

General Precautions

- Operators should be aware of and minimize the following hazards:
 - Running the truck's wheels off of bridge/dock plates, dock platforms, uneven surfaces, or inclines.
 - Colliding with other trucks or obstructions. Secure the load and close containers to prevent losing control of the load while moving.
 - o Jamming of the operator's hands between the truck and other objects.
 - o Running the truck's wheels over the operator's feet.
- Obtain carts that roll and maneuver easily with wheels that can be locked. On fourwheeled carts, those equipped with one set of articulating wheels are easier to maneuver than carts that are equipped with all stationary wheels.
- Carts with ball-bearings and pneumatic wheels are far superior to lower-quality carts with plastic wheels, especially when moving heavy loads. Keep pneumatic tires at the rated pressure and check often.
- Select carts and trucks with hard wheels for use on soft floor surfaces and soft wheels for use on hard floor surfaces.
- Carts for transporting chemicals should have rails to prevent chemicals from falling off the cart.
- Hand trucks for compressed gas cylinders should have means to secure the cylinder to the truck, and be specifically designed for this use.
- Inspect carts routinely and do not use them if they are not in good repair.
- Maintain adequate visibility. Do not stack materials beyond a safe height or in a manner that obstructs vision. Pay attention to the path of travel and do not move too fast.

- Do not exceed the manufacturer's recommended load limits. Be aware of lifting/bending and other ergonomic hazards when using carts. Avoid heavy loads that require excessive force to move, do not twist while moving a cart, and be alert to terrain hazards that can cause the cart to shift or stop abruptly (e.g., cracks, dips, uneven surfaces, etc.).
- Ensure that the load is not wider than the cart, especially when traveling in narrow halls and doorways. Do not forget the stationery mullion in double doorways.
- Do not try to navigate carts on stairs or steep inclines.
- Use a freight elevator rather than a passenger elevator when possible.
- When not in use, trucks and carts should be parked in a designated area, not in aisles or other places where they cause trip hazards, block traffic, breaker boxes, fire extinguishers and pull stations, eyewash stations, or other safety equipment.
- Trucks with drawbar handles should be parked with handles up and out of the way.
 Two-wheeled trucks should be stored upright with handles leaning against a wall.

Two-Wheeled Manual Hand Trucks

- Keep the load's center of gravity as low as possible. Place heavy objects below lighter objects.
- Balance the load so the weight will be carried by the axle, not the handles.
- Position the load so it will not slip, shift, or fall; and use straps, chain, or rope to secure load, if necessary.
- Let the truck carry the load. The operator should only balance and push.
- Never walk backwards with a hand truck.
- When going up or down a slight incline, keep the truck in front of you. Do not operate the truck on steep inclines.
- Specific purpose trucks should be used only for that purpose.

Four-Wheeled Hand Trucks and Carts

- Safe operating precautions are similar to two-wheel trucks.
- Place loads evenly to prevent tipping.
- Carts should be pushed rather than pulled except for those with a fifth wheel and a handle for pulling.