

POWERED INDUSTRIAL TRUCKS (Forklifts)

GENERAL

A powered industrial truck or forklift is a powerful tool that allows one person to precisely lift and place large heavy loads with little effort. Using a tool such as a forklift, cart or hand truck instead of lifting and carrying items by hand can reduce the risk that you will suffer a back injury. However, there is great risk of injury or death when a forklift operator:

- Has not been trained in the principles of physics that allows a forklift to lift heavy loads,
- Is not familiar with how a particular forklift operates,
- Operates the forklift carelessly, or
- Uses a forklift that is not safe due to malfunctioning, or missing parts.

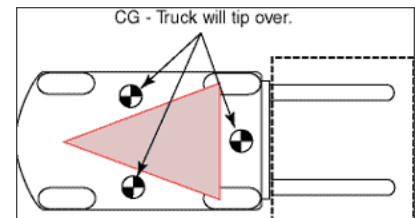
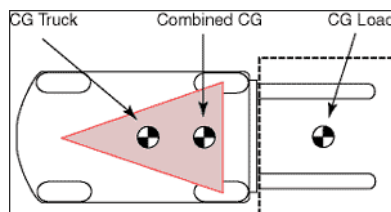
Every year nearly 100 workers are killed and 20,000 are seriously injured in forklift mishaps. These mishaps occur when:

- a forklift overturns,
- a worker is crushed by a forklift
- a worker on foot is struck by a forklift
- a worker falls from the forklift

Each forklift operator for the University of Hawaii Facilities and Grounds department must successfully complete a training program that includes theory instruction and practical (hands-on) evaluation delivered by a competent person. Furthermore the following general rules will apply to all forklift operations:

- The operator of a forklift is directly responsible for the safe operation of the forklift at all times.
- The operator of a forklift is required to complete a pre-use inspection of the forklift and immediately report any problems.
- The supervisor is responsible for ensuring a pre-use inspection is conducted.
- The employer is required to maintain the forklift in a safe operating condition.
- The employer is required to purchase forklifts that conform to ANSI safety standards.
- Always travel with the load at a safe height (usually 6-8" of the ground). Never travel with the load in an elevated position
- Operators must be familiar with the concepts of load capacity, load center, and center of gravity
- Never turn on an incline
- Always use the seatbelt
- Do not jump from a forklift that is overturning; grab the steering wheel, brace your feet, and lean opposite the fall

- Park the forklift in a safe designated area with the fork tips “buried” and steering wheel straight
- Always wear the correct PPE when refueling with propane (leather gloves, safety glasses, safety toe shoes)
- Sound the horn around blind spots and always check surrounding areas before reversing
- Always travel at a safe speed (a speed at which the operator can come to a controlled stop at all times)
- Always use three points of contact when climbing in and out of the forklift
- Never carry passengers on a forklift
- Always check clearances before reversing



CG=Center of Gravity

The forklift will not tip over as long as the Combined Center of Gravity of the truck and load system remains within the Stability Triangle. The photo on the left shows the relationship of center of gravity of the truck being combined with the center of gravity of the load. It is important to always keep CG within the Stability Triangle. In the photo to the right CG has moved outside of the triangle and the unit will tip over. As a forklift operator you must be aware of conditions or factors that affect CG.

Factors that will affect Center of Gravity:

- Travel Speed
- Terrain (slopes surfaces, potholes, debris)
- Turns, acceleration, stopping
- The load (distribution, height, position on forks)
- Tilt (forward or back)

Every operator must go through initial training and re-training every three years. Please consult with your safety specialist for training options.