

Forklift Certification Training

OSHA Compliance Guidelines

Provided by OSHA

Power Industrial Trucks

- Powered industrial trucks, commonly called forklifts or lift trucks, are used in many industries, primarily to move materials. They can be used to move, raise, lower, or remove large objects or a number of smaller objects on pallets or in boxes, crates, or other containers.

Type of Hazards

- Each type of truck presents different operating hazards. For example, a sit-down, counterbalanced high lift rider truck is more likely than a motorized hand truck to be involved in a falling load accident, because the sit-down rider truck can lift a load much higher than a hand truck. Workplace conditions also present different hazards.



The best way to protect employees from injury also depends on the type of truck operated and worksite where it is being used

Types of Fundamentals

The following are classes of commonly-used powered industrial trucks. This classification does not include all powered industrial trucks covered by the OSHA standard [[29 CFR 1910.178\(a\)](#), [29 CFR 1910.178\(b\)](#) and [29 CFR 1910.178\(c\)](#)].



Types of Fundamentals

Class III: Electric Motor Hand Trucks or Hand/Rider Trucks



Class IV: Internal Combustion Engine Trucks (Solid/Cushion Tires)



Power Sources

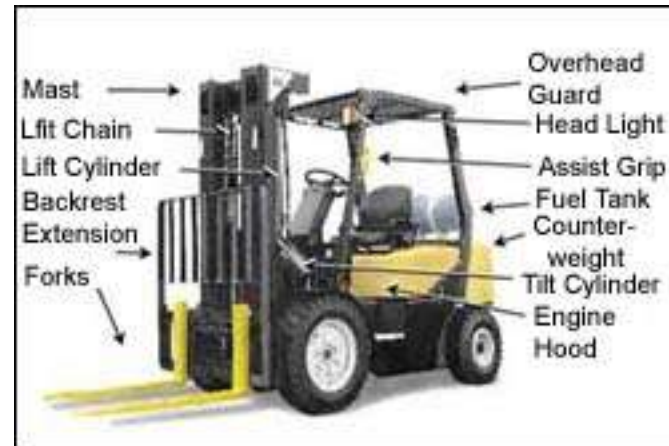
- The two main power sources for powered industrial trucks are internal combustion, which uses a traditional engine that runs on liquid petroleum gas (LPG), gasoline, diesel, or other fuel, and electric, which uses an on-board battery. This section provides information on these power sources, including some of the potential hazards and possible solutions associated with their use and with refueling and battery charging/changing operations.

Power Sources

- Other power sources that may become more widespread in the future include fuel cells and hybrid systems. Hydrogen fuel cells will have zero emissions and quiet operation plus the ability to be refueled as quickly as gasoline engines. Hybrid systems will use a combination of fuel cells and batteries.

Parts

The following are the major parts of a forklift. This discussion focuses on the most common types of forklifts. Be sure to read the operator's manual for your forklift and follow the manufacturer's recommendations.



Operating the Forklift

- Safely operating a forklift requires preparation, anticipation and careful attention in order to maintain control of the vehicle at all times. This module will identify recommended practices associated with each of the following operations:

Pre-Operation

- A vehicle that is in need of repair, defective or in any way unsafe should be removed from service. The problem should be recorded on a log and reported to a supervisor immediately. This section discusses pre-operational and operation inspections that operators should perform to ensure that forklifts will operate safely. Only operators who have been trained and evaluated in accordance with [29 CFR 1910.178\(I\)](#) can operate forklifts



Traveling & Maneuvering

Forklift operators must follow safe operating rules at all times. Operators must always maintain control of the forklift, keep a proper lookout, and operate the forklift at speeds safe for the particular operation and worksite conditions.

Training Requirements

- The standard requires employers to develop and implement a training program based on the general principles of safe truck operation, the types of vehicle(s) being used in the workplace, the hazards of the workplace created by the use of the vehicle(s), and the general safety requirements of the OSHA standard. Trained operators must know how to do the job properly and do it safely as demonstrated by workplace evaluation. Formal (lecture, video, etc.) and practical (demonstration and practical exercises) training must be provided. Employers must also certify that each operator has received the training and evaluate each operator at least once every three years.
- Prior to operating the truck in the workplace, the employer must evaluate the operator's performance and determine the operator to be competent to operate a powered industrial truck safely. Refresher training is needed whenever an operator demonstrates a deficiency in the safe operation of the truck. Training shall consist of a combination of formal instruction (e.g., lecture, discussion, interactive computer learning, video tape, written material), practical training (demonstrations performed by the trainer and practical exercises performed by the trainee), and evaluation of the operator's performance in the workplace.