Forklift Operator Training – Quick Tips

A forklift in motion is a safety risk in motion. Ensure your operators have received the proper forklift safety training.

The Occupational Safety and Health Administration (OSHA) defines a powered industrial truck (PIT) as “any mobile, power-propelled truck used to carry, push, pull, lift, stack or tier materials.” There are many different types of (PITs), and each type presents different operating hazards. PITs are commonly known as pallet trucks, rider trucks, forklifts or lift trucks. They are extremely useful in the workplace, as long as they are safely used by trained operators.

Background

OSHA revised the PIT standard, 29 Code of Federal Regulations (CFR) 1910.178, in 1999 to include operator training requirements. Violations of the PIT standard rank in the top ten most frequently cited OSHA standards each year. One of the major citations is failure to train.

Forklift Safety Training Requirements

Employers must develop and implement a training program based on the general principles of safe truck operation, the types of vehicle(s) being used, the hazards they create and the general safety requirements of the OSHA standard to ensure that operators are properly trained.

Trained operators must know how to do the job properly and safely, as demonstrated by workplace evaluations. 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’s performance at least once every three years.

Training Program Content

Operators must be initially trained in the following truck-related and workplace-related topics:

- **Truck-related:**
  - Operating instructions, warnings and precautions for type of truck
  - Similarities and differences with automobiles
  - Control and instrumentation location and use
  - Engine or motor operation
  - Steering and maneuvering
  - Visibility
  - Fork and attachment limitations and use

    - Vehicle capacity
    - Vehicle stability
    - Vehicle inspection and maintenance
    - Refueling or charging batteries
    - Operating limitations
    - Other operating instructions, warnings or precautions listed in the operator's manual
- **Workplace related:**
    - Surface conditions where truck is used
    - Load composition and stability
    - Load stacking, unstacking and transport
    - Pedestrian traffic
    - Narrow aisle and restricted area operation
    - Operation in hazardous locations
    - Ramp and sloped surface operation
    - Unique or potentially hazardous conditions
    - Operating the vehicle in closed environments

Because PITs are manufactured by different companies with various models available, the training must be specific to the operating characteristics of the specific PIT being used.

If an operator was previously trained on any of the truck or workplace-related topics, and the training is appropriate to the truck and working conditions encountered, additional training on that topic is not required if the operator has been evaluated and found competent.

Evaluation and Refresher Training

An evaluation of the performance of each PIT operator must be conducted every three years. OSHA requires that formal refresher training be conducted under certain circumstances. There is no set frequency, but employers do need to retrain when:

- The operator has been observed to operate the vehicle in an unsafe manner.
- The operator has been involved in an accident or near-miss incident.
- The operator has received an evaluation revealing that the operator is not operating the truck safely.
- The operator is assigned to drive a different type of truck.
- A condition in the workplace changes in a manner that could affect safe operation of the truck.

Certification

The employer must certify that every operator has received appropriate training, has been evaluated and has demonstrated competency in performing the operator's duties. The name of the trainee, date of training, evaluation date and name of the person(s) performing the training or evaluation must be included on the certification.

Sources
29 CFR 1910.178, Powered Industrial Trucks.
Occupational Health and Safety Administration (OSHA), Powered Industrial Truck etool.

Frequently Asked Questions

Q: What is the stability triangle?

A: The majority of counterbalanced PITs have a three-point suspension system. The truck's steer axle is attached to the truck by a pivot pin in the axle's center. When these three points are connected with imaginary lines, the stability triangle is formed. When the center of gravity remains within the stability triangle, the truck is stable and will not tip over. An unloaded PIT on a level surface will have a

center of gravity in the middle of the stability triangle. As a load is added to the truck, or if the truck is on an inclined surface, the center of gravity will move within the stability triangle. If the center of gravity moves outside of the stability triangle, the truck will tip over.

Q: What is considered formal training?

A: Formal training is the combination of classroom and OSHA safety training, including lecture, discussion, videos, interactive computer learning or written material.

Source: Grainger Know How – https://www.grainger.com/know-how