

Developing a Training Program for Powered Industrial Truck Operators

This handout is intended to be used for training purposes only. It is not a substitute for any provisions of the Occupational Safety and Health Act of 1970, or for any standards issued by the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA).

How Do I Develop a Powered Industrial Operator Training Program?

Before you begin developing your operator training program you should become familiar with the OSHA standard for powered industrial trucks and any operator's manual pertinent to the equipment you have in your workplace.

IDENTIFY YOUR OPERATORS

First, you need to determine the employees that will be required to operate powered industrial trucks in your workplace. If an employee has other duties, but sometimes operates a powered industrial truck, training must be provided.

IDENTIFY THE TYPES OF POWERED INDUSTRIAL TRUCKS YOU HAVE IN YOUR WORKPLACE AND THOSE EMPLOYEES WHO WILL BE REQUIRED TO OPERATE THE VEHICLES.

There are many different types of powered industrial trucks. Typically, these types of vehicles are known as forklifts or lift trucks. Some types of trucks are not capable of being ridden by the operator. These are also covered by the OSHA standard and training is required. Some trucks are fitted with attachments purchased from the manufacturer. The use of these attachments may affect the manner in which the truck is handled; therefore training on the use of the attachment would also be required. If your employees will be expected to operate several different types of powered industrial trucks, then training is required on the unique handling characteristics of the vehicles.

METHODS OF TRAINING

Once you have identified your truck operators and types of trucks you have in your workplace, you should determine the methods of training you will use.

Training must consist of a combination of formal instruction and practical training. Using both methods is the only way to ensure that the trainee receives and comprehends the instruction and uses the information to safely operate a powered industrial truck. Note that the formal training need not take place in a classroom. Discussions can consist of the trainer talking to the trainee and explaining the training material, either in the workplace or in another location. The training must, however, include an explanatory element as well as a practical element.

Formal instruction may include lectures, conferences, classroom discussions, demonstrations, and written or oral tests. To enhance the training and make it more understandable to the employee, employers and other trainers may use movies, slides, computers, video tapes and other visual presentations.

Using visual aids has several advantages, including:

1. The employees being trained remain more attentive, thereby increasing the training's effectiveness;
2. The trainer can use visual presentations to ensure that the necessary information is covered during the training;
3. Graphical presentations make better use of the training time by decreasing the need for the instructor to carry on long discussions about the instructional material; and,
4. Trainees have greater retention of information learned from graphical presentations.

While some employees can learn instructional material while seated in a classroom, other employees may learn best by observing an operation (demonstration) and/or by personally performing an operation (practical exercise). In most cases, a combination of different training methods provides the best training in the least amount of time. Once you have selected the method of training, then the content of the training program must be considered to include all pertinent training items.

TRAINING PROGRAM CONTENT

Because each type (make and model) of powered industrial truck has different operating characteristics, limitations, and other unique features, a good employee training program for powered industrial truck operators should be based upon the type of vehicles that the employee will be trained and authorized to operate. The training should also emphasize the workplace's features that will affect how the vehicle must be operated. Finally, the training should include the general safety rules applicable to operating any powered industrial truck.

The following is an outline of a generic powered industrial truck operator training program:

1. Characteristics of the powered industrial truck(s) the employee will be allowed to operate:

- a. Differences from the automobile;
- b. Controls and instrumentation: location, what they do, and how they work;
- c. Engine or motor operation;
- d. Steering and maneuvering;
- e. Visibility;
- f. Fork and/or attachment adaptation, operation, and limitations of their use;
- g. Vehicle capacity;
- h. Vehicle stability;
- i. Vehicle inspection and maintenance the operator will be required to perform;
- j. Refueling or charging and recharging batteries;
- k. Operating limitations; and
- l. Any other operating instruction, warning, or precaution listed in the operator's manual for the type of vehicle the employee is being trained to operate.

2. The operating environment:

- a. Floor surfaces and/or ground conditions where the vehicle will be operated;
- b. Composition of probable loads and load stability;
- c. Load manipulation, stacking, unstacking;
- d. Pedestrian traffic;
- e. Narrow aisle and restricted place operation;
- f. Operating in classified hazardous locations;
- g. Operating the truck on ramps and other sloped surfaces that would affect the stability of the vehicle;
- h. Other unique or potentially hazardous environmental conditions that exist or may exist in the workplace; and
- i. Operating the vehicle in closed environments and other areas where insufficient ventilation and/or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust.

3. The requirements of the OSHA Standard.

After the training program has been completed, the employer must evaluate the trainee's knowledge and skills and determine that the employee is competent to operate the truck safely.

EMPLOYEE EVALUATION

When the employee completes the training exercises and prior to operating the truck in the workplace, an evaluation of the employee must be performed. This evaluation will determine the adequacy of training and the ability of the employee to perform truck operations safely in the workplace. The OSHA standard also requires that an evaluation of the operator's performance be conducted at least once every three years and after refresher training.

The employer should then complete a certification of training record containing the name of the operator, the date of the training, the date of the evaluation, and the identity of the person(s) performing the training or evaluation.

REFRESHER TRAINING

During the course of truck operation, the supervisor may observe the employee performing an unsafe act, such as riding with the load too high or traveling at an unsafe speed. The person making the correction should point out the incorrect manner of operation of the truck or other unsafe act being conducted, tell the employee how to do the operation correctly, and then ensure the employee does the operation correctly. When there have been multiple on-the-spot corrections, the employer may decide to conduct a more structured retraining program which would include the following information:

1. Common unsafe situations encountered in the workplace;
2. Unsafe operating methods observed or known to be used;
3. The need for constant attentiveness to the vehicle, the workplace conditions, and the manner in which the vehicle is operated.

The above subject areas need to be taught so that the trainee receives all the information needed for safe vehicle operation. Specific details of the above subject areas may be found in the vehicle manufactures' literature, the national consensus standards [e.g., the ASME B56 series of standards (current revisions)], and the OSHA standards relating to powered industrial truck operator training.