

Chapter 48: [Industrial Trucks](#)

## Equipment Requirements

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URL: <http://www-group.slac.stanford.edu/esh/eshmanual/references/indtruckReqEquipment.pdf>

### 1 Purpose

The purpose of these requirements is to ensure that *industrial trucks* meet applicable standards and are maintained in good working order. They cover inspection, storage, maintenance, marking, and modification of industrial trucks and associated attachments. They apply to workers (as *operators*), *custodians*, and Fleet Services.

### 2 Requirements

Industrial trucks must be designed and manufactured in accordance with applicable standards (such as [ASME B56.1](#)) and marked, stored, and maintained following [8 CCR 3649–3669](#) and the requirements below.

#### 2.1 Inspection

Industrial trucks must pass an initial inspection, conducted by a *custodian*, when first brought on-site and a pre-use inspection, conducted by the operator, before each shift (see [Industrial Trucks: Inspection Procedures](#)).

#### 2.2 Storage

Unattended industrial trucks must be parked away from high traffic areas and effectively barricaded where necessary. The fork tines will be lowered with tips on the floor or ground. The keys must not be left in parked trucks.

#### 2.3 Maintenance

Custodians in coordination with Fleet Services will establish and follow a program of regular maintenance to ensure that industrial trucks remain in a safe operating condition.

Only employees of Fleet Services or a third-party approved by it are permitted to maintain or repair industrial trucks.

Repair operations involving open flames or that may produce sparks or other sources of ignition may not be performed in Class I (flammable and combustible gases and vapors), II (combustible dust), and III

(ignitable fibers and combustible flyings) locations per NFPA 70 unless and until tests show that atmospheric concentrations of flammable or combustible vapors do not exceed 20 percent of the *lower explosive limit (LEL)* of such flammable or combustible materials and until precautions, such as removal of flammable material and provisions for adequate ventilation, are taken to maintain the atmosphere at or below 20 percent LEL.(See [NFPA 505](#).)

Batteries on all powered trucks must be disconnected during repairs to the primary electrical system unless power is necessary for the testing and repair. On trucks equipped with systems capable of storing residual energy, that energy must be safely discharged before work on the primary electrical system begins. (See [Chapter 51, “Control of Hazardous Energy”](#).)

### 2.3.1 Battery-charging Stations

Battery-charging stations for use with industrial trucks must meet the requirements of Cal/OSHA ([8 CCR 5185](#)) except that no eye wash or emergency shower is required since no battery maintenance is conducted in these areas.

## 2.4 Marking

Each industrial truck will have a conspicuously displayed, legible plate or other legible marking verifying that it is designed and manufactured in accordance with applicable standards. At a minimum, the marking must contain the following data:

1. Make, model, and manufacturer’s serial number
2. Rated capacity
3. Caution and/or restriction of operation

### 2.4.1 Seat Belts

Per [8 CCR 3653](#), seat belts installed after June 26, 1998, must be labeled as meeting the design requirements of [SAE J386-1993](#). Seat belt assemblies installed on or before June 26, 1998, must be labeled as meeting either the design requirements of the SAE standard indicated or above the [SAE J386-1985](#) standard.

## 2.5 Modification

No modifications or additions to industrial trucks will be performed without written authorization from the manufacturer.

## 2.6 Attachments

Some attachments mount on the forks and others mount directly on the back rest. Modifications and additions including attachments that affect capacity and safe operation may not be performed without the manufacturer’s prior written approval. In the event the forklift manufacturer responds in the negative or does not respond, a qualified engineer can evaluate the attachment and determine if it can be used (see [8 CCR 3650](#)). Capacity, operation, and maintenance instruction plates, tags, or decals must be changed to

reflect the change in truck weight, capacity, and center of gravity. The markings will show the approximate weight of the truck and attachment combination at maximum elevation with load laterally centered.

## 2.6.1 Fork Extensions

Manufacturer-approved fork extensions are only appropriate for specific tasks. The use of non-factory installed extensions requires the approval of the manufacturer or, as stated above, a qualified engineer. A rated load test will be documented and conducted every two years, and will be marked with the date of the last inspection. (See [Chapter 41, “Hoisting and Rigging”](#), for lifting devices and inspection criteria.)

Extensions must be inspected before use for

- Bending
- Overloading
- Excess corrosion
- Cracking
- Other deterioration

## 2.7 Non-SLAC Equipment

Before bringing a leased or rented industrial truck onto SLAC property, the custodian will verify that the vehicle meets the minimum requirements of this program.

## 3 Forms

The following forms and systems are required by these requirements:

- None

## 4 Recordkeeping

The following recordkeeping requirements apply for these requirements:

- The custodian will ensure maintenance records are kept and made available for inspection upon request.

## 5 References

[SLAC Environment, Safety, and Health Manual](#) (SLAC-I-720-0A29Z-001)

- [Chapter 48, “Industrial Trucks”](#)
  - [Industrial Trucks: Inspection Procedures](#) (SLAC-I-730-0A21C-009)
  - [Industrial Trucks: Operating Requirements](#) (SLAC-I-730-0A21S-011)

- [Chapter 41, “Hoisting and Rigging”](#)
- [Chapter 51, “Control of Hazardous Energy”](#)

#### Other Documents

- Title 8, *California Code of Regulations*, “Industrial Relations”, Division 1, “Department of Industrial Relations”, Chapter 4, “Division of Industrial Safety”, Subchapter 7, “General Industry Safety Orders”, Group 4, “General Mobile Equipment and Auxiliaries”, Article 25, “Industrial Trucks, Tractors, Haulage Vehicles, and Earthmoving Equipment” ([8 CCR 3649–3669](#))
  - Section 3650, “Industrial Trucks – General” ([8 CCR 3650](#))
  - Section 3650, “Seat Belts” ([8 CCR 3653](#))
- Title 8, *California Code of Regulations*, “Industrial Relations”, Division 1, “Department of Industrial Relations”, Chapter 4, “Division of Industrial Safety”, Subchapter 7, “General Industry Safety Orders”, Group 16, “Control of Hazardous Substances”, Article 109, “Hazardous Substances and Processes”, Section 5185, “Changing and Charging Storage Batteries” ([8 CCR 5185](#))
- American Society of Mechanical Engineers (ASME) B56.1, “Safety Standard for Low Lift and High Lift Trucks” ([ASME B56.1](#))
- National Fire Protection Association (NFPA) 505, “Fire Safety Standard for Powered Industrial Trucks Including Type Designations, Areas of Use, Conversions, Maintenance, and Operations” ([NFPA 505](#))
- SAE International (SAE) J386-1993, “Operator Restraint System for Off-Road Work Machines” ([SAE J386-1993](#))
- SAE International (SAE) J386-1985, “Operator Restraint System for Off-Road Work Machines” ([SAE J386-1985](#))