



# Equipment Safety Presentation



AMERICAN SOCIETY OF  
**SAFETY PROFESSIONALS**

Northern Virginia Chapter





# MARYLAND DEPARTMENT OF LABOR



- HOME
- UNEMPLOYMENT
- LICENSING
- JOB
- LABOR
- FINANCIAL
- RACING
- ABOUT US



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- > [Compliance](#)
- > [Consultation](#)
- > [Outreach](#)
- > [Research](#)
- > [Discrimination](#)
- > [Cooperative Programs](#)
- > [MOSH home page](#)

## Latest News

## Specific Requirements - MOSH

Under an agreement with the Federal Occupational Safety and Health Administration (OSHA), MOSH promotes occupational safety and health in workplaces across Maryland. In addition to adopting many of the federal standards for **General Industry (29 CFR 1910)**, **Construction (29 CFR 1926)**, and **Agriculture (29 CFR 1928)**, MOSH has supplemented the OSHA standards with several requirements unique to Maryland. The following listing sets out these Maryland-specific provisions.

For further information about MOSH-Specific requirements, please call **MOSH Consultation Services** at 410-527-4472.

Copies of the law and regulations are available from **MOSH Training and Education** at the telephone numbers below.

410-527-2091 or 410-527-2092, FAX: 410-527-4490



## Title 5. Occupational Safety and Health.

- **Subtitle 1.** Definitions; General Provisions.
- **Subtitle 2.** Administration and Enforcement.
- **Subtitle 3.** Regulations.
- **Subtitle 4.** Access to Information About Hazardous and Toxic Substances.
- **Subtitle 5.** Training of Power Equipment Operators.
- **Subtitle 6.** Miscellaneous Provisions:
  - Asbestos protective clothing
  - Work in confined spaces
  - Work in manholes
  - Discrimination against employee

**5-104**

- (a) Each employer shall provide each employee of the employer with employment and a place of employment that are:
  - (1) safe and healthful: and
  - (2) Free from each recognized hazard that is causing or likely to cause death or serious physical harm to the employee.
- (b) (1) Each employer shall comply with this title, each applicable regulation that the Commissioner adopts to carry out this title, and each applicable order that the Commissioner passes under this title.  
  
(2) Each employee shall comply with this title and, when applicable to the employee's actions and conduct in the course of employment , each regulation that the Commissioner passes under this title.
- (c) Each employer shall keep its employees informed of their protections and duties under this title, including each applicable occupational safety and health standard, by:
  - (1) Posting notice where notices to employees normally are posted: or
  - (2) Using other appropriate means.

**5-501**

- (a) In this subtitle, "power equipment" means:
  - (1) A backhoe;
  - (2) A bulldozer;
  - (3) A front-end loader;
  - (4) skid steer equipment;
  - (5) a gradall;
  - (6) a scraper pan
  - (7) a crane; or
  - (8) a hoist
- (b) "Power equipment" does not include agricultural equipment that is used in a farming operation

#### 5-502

- (a) This subtitle does not apply to an employer with fewer than 6 employees

#### 5-503

- (a) Each employer that hires employees to operate power equipment shall develop and carry out an employee safety training program designed to inform employees and train employees in applicable standards for safe operation of power equipment including:
  - (1) limitations and use;
  - (2) rated load capacities; and
  - (3) special hazards
- (b) On request by the Commissioner, an employer shall give the Commissioner a copy of its safety-training program.
- (c) Each employer that hires employees to operate power equipment shall:
  - (1) keep on file for inspection:
    - (i) A written description of its employee training program; and
    - (ii) A notation of where an employee received safety training, if the employer did not provide the employee with safety training;
  - (2) assure that specifications of a manufacturer applicable to operation of a piece of power equipment are available to each operator; and
  - (3) post operating instructions as required by occupational safety and health standards.

#### 5-504

This subtitle may not be construed to allow or require licensing, registration, or certification of an operator of power equipment



# OSHA National News Release

U.S. Department of Labor

February 15, 2022

## US Department of Labor announces proposed rule to update powered industrial trucks standard for general industry, construction

**WASHINGTON** – The U.S. Department of Labor announced today a Notice of Proposed Rulemaking by the department's [Occupational Safety and Health Administration](#) to improve worker safety and health by ensuring the agency's general industry and construction industry rules reflect current industry practice and state-of-the-art technology.

[The proposed rule](#) will update the design and construction requirements for OSHA's powered industrial trucks standards for general industry and construction, including fork trucks, tractors, platform lift trucks, motorized hand trucks and other specialized industrial trucks powered by an electric motor or an internal combustion engine.

Under the proposed rule, OSHA will update its general industry and construction standards for powered industrial trucks by adding references to the latest design and construction requirements published by the American National Standards Institute in conjunction with the Industrial Truck Standards Development Foundation.

The first standard for powered industrial trucks took effect in 1971, based on industry consensus standards in 1969. Since then, national consensus standards [have been updated](#) several times.

In addition to updating the design and construction requirements for future manufactured powered industrial trucks, the proposed rule will also address equipment manufactured before the effective date of the final rule.

This proposal is part of a series of regulatory projects by OSHA to update nearly 200 consensus and industry standards to reflect the current versions of consensus and national industry standards.

Deadline for submitting comments is May 17, 2022.



# Excavator Safety Awareness

This presentation is intended for excavator operators, their supervisors and workers near the operating equipment. Today's discussion or review is not a training class to certify you as an operator, but rather we would like to discuss what safe lifting (craning) operations look like when using a excavator, and some best practices for equipment supervisors, operators and workers who are near the operating equipment. For some of you, this might be a refresher, for others it might all be new information.

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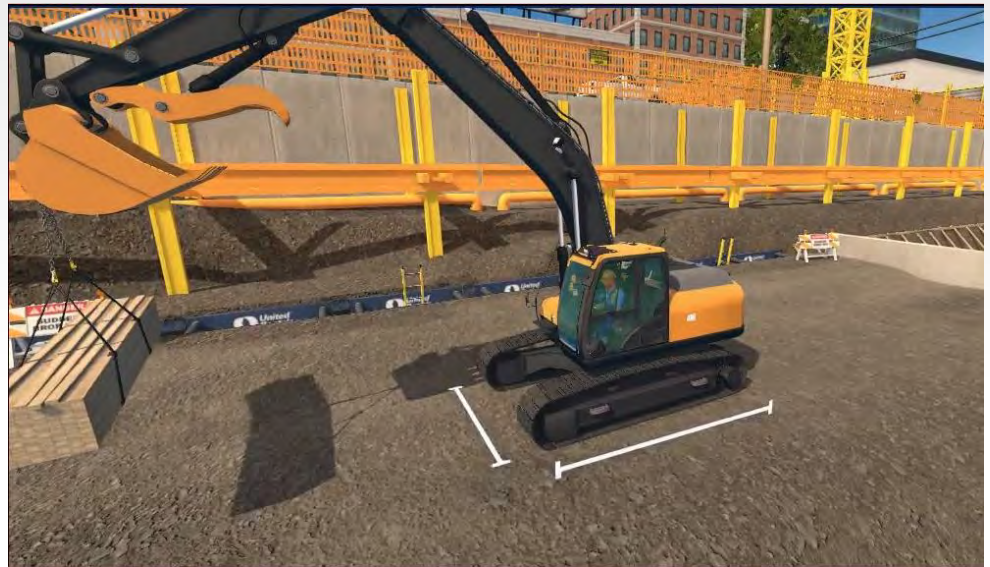
# Content and Scope





# 1 - Ensure the machine is rated to handle the load.

- Lifting capacities varies based on manufacture, unit size and configuration.
- Capacities are calculated with the unit situated on a firm, level surface.
- Units typically have more lifting capacity over the front or rear ends of the tracks than over the side.
- The proper machine provides sufficient lift and reach to place the material where it is needed while maintaining stability and control at all times.



2 - Before lifting, inspect the machine to ensure there is no damage or other factors that could impede lifting capacity.

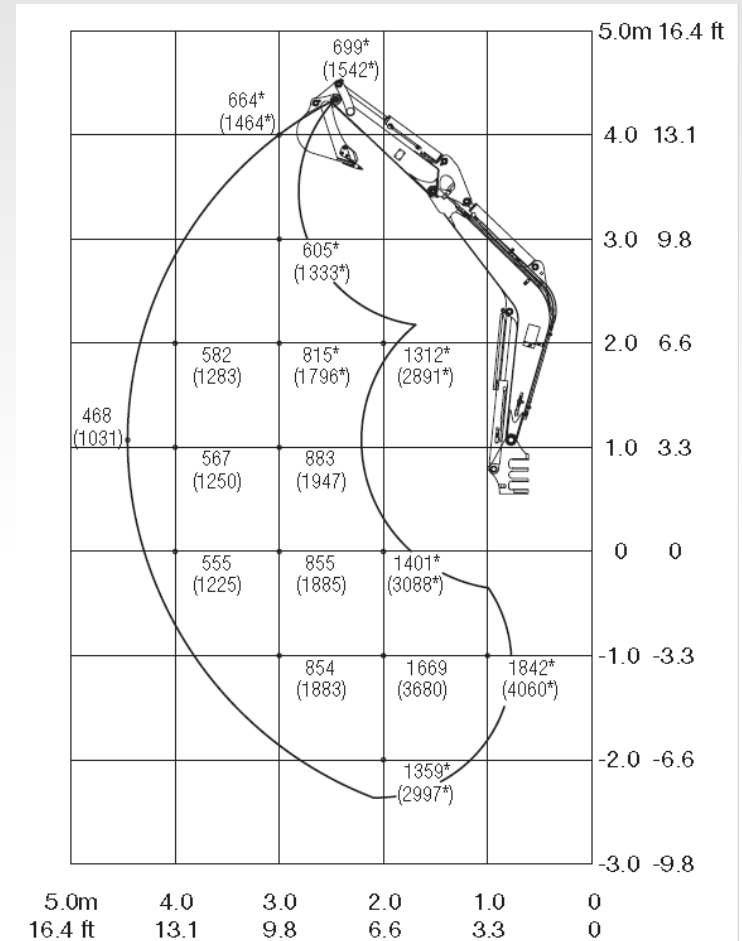
Regulations require that several types of inspections be performed when operating power mobile equipment. These inspections break down into the following classifications:

- Workplace
- Pre-start/Daily
- Follow the manufacturers' maintenance schedule

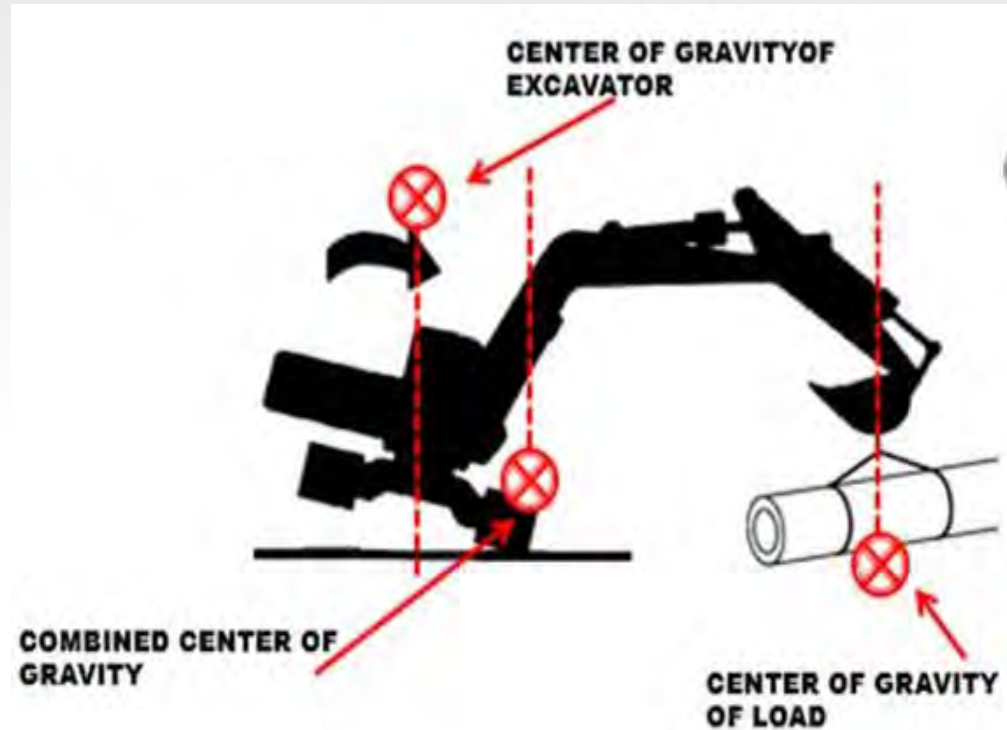
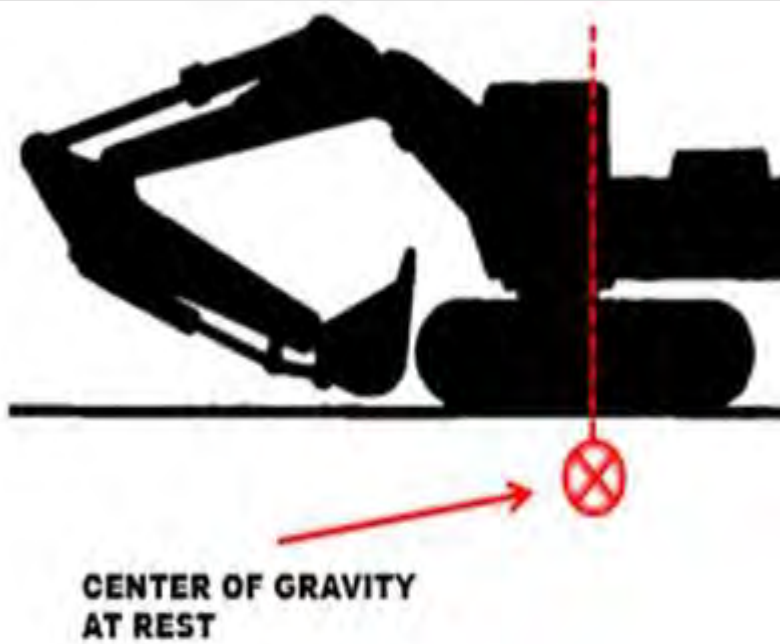


# 3 - Learn to read lift charts

Machine capacity is constantly changing, depending on where the boom is in its working range.



# CENTER OF GRAVITY



# 4 - Know How Much You're Really Lifting

- Know the total weight of the load you intend to lift.
- Add the weight of the attachment to the load.
- Proceed cautiously if the load weight cannot be determined.



# 5 - When selecting rigging for the lift, check its load rating.

Only use rigging designed and approved for overhead lifting (static loads not dynamic loads) and is rated strong enough for the load.



## 6 - Know the condition of the rigging.

- Rigging should be inspected before each use to ensure there are no signs of damage or wear.
- Blocking between the edge and the rigging should be used to prevent damage.



# 7 - Always ensure the load is properly secured to the carrier.

- Always refer to the **operator's manual** which will include a section on lifting.
- Take advantage of all available lifting points to ensure load stability.
- Make sure that the load is secured so that it cannot shift or come apart during the lift.
- Use slow & deliberate motion during lift and placement operations.
- Use taglines to prevent swinging and swaying.





## 8 - Ensure the machine is positioned on a stable work surface, as far back from the edge of any nearby excavations as possible.

- Lift over the idler end of the tracks.
- Make sure the machine is positioned where tracks are stable with no voids or soft ground underneath that could cause the machine to rock.
- Use mats, wood platforms or steel plates to provide a more solid work platform to improve marginal stability locations.
- Perform a test lift if there are any stability doubts.



# 9 - Setup for maximum stability and lift capacity.

- The blade should be placed on the ground for stability.
- If equipped with retractable tracks:
  - Tracks should only be brought in for fitting through tight areas.
  - Only operate with the tracks fully extended out.



# 10 - Clear the area of any workers

- Never move the load suddenly or over people, occupied vehicles and/or structures.
- Confirm that all bystanders are out of the swing radius of the boom.
- The only person recommended in the immediate area is a properly positioned spotter.

