

29 CFR 1926.602

Material handling equipment

Earthmoving equipment; General.

1926.602(a)(1)

These rules apply to the following types of earthmoving equipment: scrapers, loaders, crawler or wheel tractors, bulldozers, off-highway trucks, graders, agricultural and industrial tractors, and similar equipment. The promulgation of specific rules for compactors and rubber-tired "skid-steer" equipment is reserved pending consideration of standards currently being developed.

1926.602(a)(2)

Seat belts.

1926.602(a)(2)(i)

Seat belts shall be provided on all equipment covered by this section and shall meet the requirements of the Society of Automotive Engineers, J386-1969, Seat Belts for Construction Equipment. Seat belts for agricultural and light industrial tractors shall meet the seat belt requirements of Society of Automotive Engineers J333a-1970, Operator Protection for Agricultural and Light Industrial Tractors.

1926.602(a)(2)(ii)

Seat belts need not be provided for equipment which is designed only for standup operation.

1926.602(a)(2)(iii)

Seat belts need not be provided for equipment which does not have roll-over protective structure (ROPS) or adequate canopy protection.

..1926.602(a)(3)

1926.602(a)(3)

Access roadways and grades.

1926.602(a)(3)(i)

No employer shall move or cause to be moved construction equipment or vehicles upon any access roadway or grade unless the access roadway or grade is constructed and maintained to

29 CFR 1926.602

Material handling equipment

accommodate safely the movement of the equipment and vehicles involved.

1926.602(a)(3)(ii)

Every emergency access ramp and berm used by an employer shall be constructed to restrain and control runaway vehicles.

1926.602(a)(4)

Brakes. All earthmoving equipment mentioned in this 1926.602(a) shall have a service braking system capable of stopping and holding the equipment fully loaded, as specified in Society of Automotive Engineers SAE-J237, Loader Dozer-1971, J236, Graders-1971, and J319b, Scrapers-1971. Brake systems for self-propelled rubber-tired off-highway equipment manufactured after January 1, 1972 shall meet the applicable minimum performance criteria set forth in the following Society of Automotive Engineers Recommended Practices:

Self-Propelled Scrapers.....	SAE J319b-1971.
Self-Propelled Graders.....	SAE J236-1971.
Trucks and Wagons.....	SAE J166-1971.
Front End Loaders and Dozers..	SAE J237-1971.

1926.602(a)(5)

Fenders. Pneumatic-tired earth-moving haulage equipment (trucks, scrapers, tractors, and trailing units) whose maximum speed exceeds 15 miles per hour, shall be equipped with fenders on all wheels to meet the requirements of Society of Automotive Engineers SAE J321a-1970, Fenders for Pneumatic-Tired Earthmoving Haulage Equipment. An employer may, of course, at any time seek to show under 1926.2, that the uncovered wheels present no hazard to personnel from flying materials.

1926.602(a)(6)

Rollover protective structures (ROPS). See Subpart W of this part for requirements for rollover protective structures and overhead protection.

..1926.602(a)(7)

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Rollover protective structures for off-highway trucks. The promulgation of standards for rollover protective structures for off-highway trucks is reserved pending further study and development.

29 CFR 1926.602

Material handling equipment

1926.602(a)(8)

Specific effective dates-brakes and fenders.

1926.602(a)(8)(i)

Equipment mentioned in paragraph (a)(4) and (5) of this section, and manufactured after January 1, 1972, which is used by any employer after that date, shall comply with the applicable rules prescribed therein concerning brakes and fenders. Equipment mentioned in paragraphs (a)(4) and (5) of this section, and manufactured before January 1, 1972, which is used by any employer after that date, shall meet the applicable rules prescribed herein not later than June 30, 1973. It should be noted that, as permitted under 1926.2, employers may request variations from the applicable brakes and fender standards required by this subpart. Employers wishing to seek variations from the applicable brakes and fenders rules may submit any requests for variations after the publication of this document in the Federal Register. Any statements intending to meet the requirements of 1926.2(b)(4), should specify how the variation would protect the safety of the employees by providing for any compensating restrictions on the operation of equipment.

1926.602(a)(8)(ii)

Notwithstanding the provisions of paragraphs (a)(5) and (a)(8)(i) of this section, the requirement that fenders be installed on pneumatic-tired earthmoving haulage equipment, is suspended pending reconsideration of the requirement.

..1926.602(a)(9)

[1926.602\(a\)\(9\)](#)

Audible alarms.

1926.602(a)(9)(i)

All bidirectional machines, such as rollers, compactors, front-end loaders, bulldozers, and similar equipment, shall be equipped with a horn, distinguishable from the surrounding noise level, which shall be operated as needed when the machine is moving in either direction. The horn shall be maintained in an operative condition.

1926.602(a)(9)(ii)

No employer shall permit earthmoving or compacting equipment which has an obstructed

29 CFR 1926.602

Material handling equipment

view to the rear to be used in reverse gear unless the equipment has in operation a reverse signal alarm distinguishable from the surrounding noise level or an employee signals that it is safe to do so.

1926.602(a)(10)

Scissor points. Scissor points on all front-end loaders, which constitute a hazard to the operator during normal operation, shall be guarded.

1926.602(b)

Excavating and other equipment.

1926.602(b)(1)

Tractors covered in paragraph (a) of this section shall have seat belts as required for the operators when seated in the normal seating arrangement for tractor operation, even though back-hoes, breakers, or other similar attachments are used on these machines for excavating or other work.

1926.602(b)(2)

For the purposes of this subpart and of Subpart N of this part, the nomenclatures and descriptions for measurement of dimensions of machinery and attachments shall be as described in Society of Automotive Engineers 1970 Handbook, pages 1088 through 1103.

..1926.602(b)(3)

1926.602(b)(3)

The safety requirements, ratios, or limitations applicable to machines or attachment usage covered in Power Crane and Shovel Associations Standards No. 1 and No. 2 of 1968, and No. 3 of 1969, shall be complied with, and shall apply to cranes, machines, and attachments under this part.

[1926.602\(c\)](#)

Lifting and hauling equipment (other than equipment covered under Subpart N of this part).

[1926.602\(c\)\(1\)](#)

29 CFR 1926.602

Material handling equipment

Industrial trucks shall meet the requirements of 1926.600 and the following:

1926.602(c)(1)(i)

Lift trucks, stackers, etc., shall have the rated capacity clearly posted on the vehicle so as to be clearly visible to the operator. When auxiliary removable counterweights are provided by the manufacturer, corresponding alternate rated capacities also shall be clearly shown on the vehicle. These ratings shall not be exceeded.

1926.602(c)(1)(ii)

No modifications or additions which affect the capacity or safe operation of the equipment shall be made without the manufacturer's written approval. If such modifications or changes are made, the capacity, operation, and maintenance instruction plates, tags, or decals shall be changed accordingly. In no case shall the original safety factor of the equipment be reduced.

1926.602(c)(1)(iii)

If a load is lifted by two or more trucks working in unison, the proportion of the total load carried by any one truck shall not exceed its capacity.

1926.602(c)(1)(iv)

1926.602(c)(1)(iv)

Steering or spinner knobs shall not be attached to the steering wheel unless the steering mechanism is of a type that prevents road reactions from causing the steering handwheel to spin. The steering knob shall be mounted within the periphery of the wheel.

1926.602(c)(1)(v)

All high lift rider industrial trucks shall be equipped with overhead guards which meet the configuration and structural requirements as defined in paragraph 421 of American National Standards Institute B56.1-1969, Safety Standards for Powered Industrial Trucks.

1926.602(c)(1)(vi)

All industrial trucks in use shall meet the applicable requirements of design, construction, stability, inspection, testing, maintenance, and operation, as defined in American National

29 CFR 1926.602 Material handling equipment

Standards Institute B56.1-1969, Safety Standards for Powered Industrial Trucks.

1926.602(c)(1)(vii)

Unauthorized personnel shall not be permitted to ride on powered industrial trucks. A safe place to ride shall be provided where riding of trucks is authorized.

[1926.602\(c\)\(1\)\(viii\)](#)

Whenever a truck is equipped with vertical only, or vertical and horizontal controls elevatable with the lifting carriage or forks for lifting personnel, the following additional precautions shall be taken for the protection of personnel being elevated.

1926.602(c)(1)(viii)(A)

Use of a safety platform firmly secured to the lifting carriage and/or forks.

..1926.602(c)(1)(viii)(B)

1926.602(c)(1)(viii)(B)

Means shall be provided whereby personnel on the platform can shut off power to the truck.

1926.602(c)(1)(viii)(C)

Such protection from falling objects as indicated necessary by the operating conditions shall be provided.

[1926.602\(d\)](#)

Powered industrial truck operator training.

Note: The requirements applicable to construction work under this paragraph are identical to those set forth at §1910.178(l) of this chapter.

[44 FR 8577, Feb. 9, 1979; 44 FR 20940, Apr. 6, 1979, as amended at 58 FR 35183, June 30, 1993; 63 FR 66274, Dec. 1, 1998]

[← Next Standard \(1926.603\)](#)