

(b) Guards shall be securely in place while machinery is being operated, except when testing or making adjustments which cannot be performed without removal of the guard.

**§ 57.14113 Inclined conveyors: backstops or brakes.**

Backstops or brakes shall be installed on drive units of inclined conveyors to prevent the conveyors from running in reverse, creating a hazard to persons.

**§ 57.14114 Air valves for pneumatic equipment.**

A manual master quick-close type air valve shall be installed on all pneumatic-powered equipment if there is a hazard of uncontrolled movement when the air supply is activated. The valve shall be closed except when the equipment is being operated.

[53 FR 32528, Aug. 25, 1988; 53 FR 44588, Nov. 4, 1988]

**§ 57.14115 Stationary grinding machines.**

Stationary grinding machines, other than special bit grinders, shall be equipped with—

- (a) Peripheral hoods capable of withstanding the force of a bursting wheel and enclosing not less than 270°—of the periphery of the wheel;
- (b) Adjustable tool rests set so that the distance between the grinding surface of the wheel and the tool rest is not greater than ¼ inch; and
- (c) A safety washer on each side of the wheel.

[53 FR 32528, Aug. 25, 1988; 53 FR 44588, Nov. 4, 1988]

**§ 57.14116 Hand-held power tools.**

- (a) Power drills, disc sanders, grinders and circular and chain saws, when used in the hand-held mode shall be operated with controls which require constant hand or finger pressure.
- (b) Circular saws and chain saws shall not be equipped with devices which lock-on the operating controls.

**§ 57.14130 Roll-over protective structures (ROPS) and seat belts for surface equipment.**

(a) *Equipment included.* Roll-over protective structures (ROPS) and seat belts shall be installed on—

- (1) Crawler tractors and crawler loaders;
- (2) Graders;
- (3) Wheel loaders and wheel tractors;
- (4) The tractor portion of semi-mounted scrapers, dumpers, water wagons, bottom-dump wagons, rear-dump wagons, and towed fifth wheel attachments;
- (5) Skid-steer loaders; and
- (6) Agricultural tractors.

(b) *ROPS construction.* ROPS shall meet the requirements of the following Society of Automotive Engineers (SAE) publications, as applicable, which are incorporated by reference:

- (1) SAE J1040, "Performance Criteria for Roll-Over Protective Structures (ROPS) for Construction, Earthmoving, Forestry, and Mining Machines," 1986; or
- (2) SAE J1194, "Roll-Over Protective Structures (ROPS) for Wheeled Agricultural Tractors", 1983.

(c) *ROPS labeling.* ROPS shall have a label permanently affixed to the structure identifying—

- (1) The manufacturer's name and address;
- (2) The ROPS model number; and
- (3) The make and model number of the equipment for which the ROPS is designed.

(d) *ROPS installation.* ROPS shall be installed on the equipment in accordance with the recommendations of the ROPS manufacturer.

(e) *ROPS maintenance.* (1) ROPS shall be maintained in a condition that meets the performance requirements applicable to the equipment. If the ROPS is subjected to a roll-over or abnormal structural loading, the equipment manufacturer or a registered professional engineer with knowledge and experience in ROPS design shall recertify that the ROPS meets the applicable performance requirements before it is returned to service.

(2) Alterations or repairs on ROPS shall be performed only with approval from the ROPS manufacturer or under

the instructions of a registered professional engineer with knowledge and experience in ROPS design. The manufacturer or engineer shall certify that the ROPS meets the applicable performance requirements.

(f) *Exemptions.* (1) This standard does not apply to—

(i) Self-propelled mobile equipment manufactured prior to July 1, 1969;

(ii) Over-the-road type tractors that pull trailers or vans on highways;

(iii) Equipment that is only operated by remote control; and

(2) Self-propelled mobile equipment manufactured prior to October 24, 1988, that is equipped with ROPS and seat belts that meet the installation and performance requirements of 30 CFR 57.9088 (1986 edition) shall be considered in compliance with paragraphs (b) and (h) of this section.

(g) *Wearing seat belts.* Seat belts shall be worn by the equipment operator except that when operating graders from a standing position, the grader operator shall wear safety lines and a harness in place of a seat belt.

(h) *Seat belts construction.* Seat belts required under this section shall meet the requirement of SAE J386, “Operator Restraint System for Off-Road Work Machines” (1985, 1993, or 1997), or SAE J1194, “Roll-Over Protective Structures (ROPS) for Wheeled Agricultural Tractors” (1983, 1989, 1994, or 1999), as applicable, which are incorporated by reference.

(i) *Seat belt maintenance.* Seat belts shall be maintained in functional condition, and replaced when necessary to assure proper performance.

(j) *Publications.* The incorporation by reference of these publications is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of these publications may be examined at any Metal and Nonmetal Mine Safety and Health District Office; at MSHA’s Office of Standards, Regulations, and Variances, 1100 Wilson Boulevard, Room 2349, Arlington, Virginia 22209–3939; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: [http://www.archives.gov/federal\\_register/](http://www.archives.gov/federal_register/)

*code\_of\_federal\_regulations/ibr\_locations.html*. Copies may be purchased from the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, Pennsylvania 15096–0001.

[53 FR 32528, Aug. 25, 1988; 53 FR 44588, Nov. 4, 1988, as amended at 60 FR 33722, June 29, 1995; 67 FR 38385, June 4, 2002; 68 FR 19347, Apr. 21, 2003]

#### §57.14131 Seat belts for surface haulage trucks.

(a) Seat belts shall be provided and worn in haulage trucks.

(b) Seat belts shall be maintained in functional condition, and replaced when necessary to assure proper performance.

(c) Seat belts required under this section shall meet the requirements of SAE J386, “Operator Restraint System for Off-Road Work Machines” (1985, 1993, or 1997), which are incorporated by reference.

(d) The incorporation by reference of these publications is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of these publications may be examined at any Metal and Nonmetal Mine Safety and Health District Office; at MSHA’s Office of Standards, Regulations, and Variances, 1100 Wilson Boulevard, Room 2349, Arlington, Virginia 22209–3939; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html). Copies may be purchased from the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, Pennsylvania 15096–0001.

[53 FR 32528, Aug. 25, 1988, as amended at 67 FR 38385, June 4, 2002; 68 FR 19347, Apr. 21, 2003]

#### §57.14132 Horns and backup alarms for surface equipment.

(a) Manually-operated horns or other audible warning devices provided on self-propelled mobile equipment as a safety device shall be maintained in a functional condition.

(b)(1) When the operator has an obstructed view to the rear, self-propelled mobile equipment shall have—