§57.14113

(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 $\frac{1}{8}$ 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 semimounted 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