

**§ 75.523**

explosives and detonators). In underground structures lighting circuits shall consist of cables installed on insulators or insulated wires installed in metallic conduit or metallic armor.

**§ 75.523 Electric face equipment; deenergization.**

[STATUTORY PROVISION]

An authorized representative of the Secretary may require in any mine that electric face equipment be provided with devices that will permit the equipment to be deenergized quickly in the event of an emergency.

**§ 75.523-1 Deenergization of self-propelled electric face equipment installation requirements.**

(a) Except as provided in paragraphs (b) and (c) of this section, all self-propelled electric face equipment which is used in the active workings of each underground coal mine on and after March 1, 1973, shall, in accordance with the schedule of time specified in paragraphs (a) (1) and (2) of this section, be provided with a device that will quickly deenergize the tramping motors of the equipment in the event of an emergency. The requirements of this paragraph (a) shall be met as follows:

(1) On and after December 15, 1974, for self-propelled cutting machines, shuttle cars, battery-powered machines, and roof drills and bolters;

(2) On and after February 15, 1975, for all other types of self-propelled electric face equipment.

(b) Self-propelled electric face equipment that is equipped with a substantially constructed cab which meets the requirements of this part, shall not be required to be provided with a device that will quickly deenergize the tramping motors of the equipment in the event of an emergency.

(c) An operator may apply to the Director of Technical Support, Mine Safety and Health Administration, Department of Labor, 4015 Wilson Boulevard, Arlington, Va. 22203 for approval of the installation of devices to be used in lieu of devices that will quickly deenergize the tramping motors of self-propelled electric face equipment in the event of an emergency. The Director of Technical Support may approve

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such devices if he determines that the performance thereof will be no less effective than the performance requirements specified in § 75.523-2.

[38 FR 3407, Feb. 6, 1973, as amended at 39 FR 27557, July 30, 1974; 43 FR 12320, Mar. 24, 1978; 47 FR 28096, June 29, 1982]

**§ 75.523-2 Deenergization of self-propelled electric face equipment; performance requirements.**

(a) Deenergization of the tramping motors of self-propelled electric face equipment, required by paragraph (a) of § 75.523-1, shall be provided by:

(1) Mechanical actuation of an existing pushbutton emergency stopswitch,

(2) Mechanical actuation of an existing lever emergency stopswitch, or

(3) The addition of a separate electromechanical switch assembly.

(b) The existing emergency stopswitch or additional switch assembly shall be actuated by a bar or lever which shall extend a sufficient distance in each direction to permit quick deenergization of the tramping motors of self-propelled electric face equipment from all locations from which the equipment can be operated.

(c) Movement of not more than 2 inches of the actuating bar or lever resulting from the application of not more than 15 pounds of force upon contact with any portion of the equipment operator's body at any point along the length of the actuating bar or lever shall cause deenergization of the tramping motors of the self-propelled electric face equipment.

[38 FR 3406, Feb. 6, 1973; 38 FR 4394, Feb. 14, 1973]

**§ 75.523-3 Automatic emergency-parking brakes.**

(a) Except for personnel carriers, rubber-tired, self-propelled electric haulage equipment used in the active workings of underground coal mines shall be equipped with automatic emergency-parking brakes in accordance with the following schedule.

(1) On and after May 23, 1989—

(i) All new equipment ordered; and

(ii) All equipment originally furnished with or retrofitted with automatic emergency-parking brakes which meet the requirements of this section.

(2) On and after May 23, 1991, all other equipment.

(b) Automatic emergency-parking brakes shall—

(1) Be activated immediately by the emergency deenergization device required by 30 CFR 75.523-1 and 75.523-2;

(2) Engage automatically within 5.0 seconds when the equipment is deenergized;

(3) Safely bring the equipment when fully loaded to a complete stop on the maximum grade on which it is operated;

(4) Hold the equipment stationary despite any contraction of brake parts, exhaustion of any non-mechanical source of energy, or leakage; and

(5) Release only by a manual control that does not operate any other equipment function.

(c) Automatic emergency-parking brakes shall include a means in the equipment operator's compartment to—

(1) Apply the brakes manually without deenergizing the equipment; and

(2) Release and reengage the brakes without energizing the equipment.

(d) On and after November 24, 1989, rubber-tired, self-propelled electric face equipment not covered by paragraph (a) of this section shall be equipped with a means incorporated on the equipment and operable from each tramming station to hold the equipment stationary—

(1) On the maximum grade on which it is operated; and

(2) Despite any contraction of components, exhaustion of any non-mechanical source of energy, or leakage.

(e) The brake systems required by paragraphs (a) or (d) of this section shall be applied when the equipment operator is not at the controls of the equipment, except during movement of disabled equipment.

[54 FR 12412, Mar. 24, 1989]

**§75.524 Electric face equipment; electric equipment used in return air outby the last open crosscut; maximum level of alternating or direct electric current between frames of equipment.**

The maximum level of alternating or direct electric current that exists between the frames of any two units of

electric face equipment that come in contact with each other in the working places of a coal mine, or between the frames of any two units of electric equipment that come in contact with each other in return air outby the last open crosscut, shall not exceed one ampere as determined from the voltage measured across a 0.1 ohm resistor connected between the frames of such equipment.

[38 FR 29998, Oct. 31, 1973]

**APPENDIX A TO SUBPART F—LIST OF PERMISSIBLE ELECTRIC FACE EQUIPMENT APPROVED BY THE BUREAU OF MINES PRIOR TO MAY 23, 1936**

Motor-Driven Mine Equipment  
(Approved Under Schedules 2, 2A, 2B, and 2C)

Approval No.	Date
AIR COMPRESSORS	
128 .....	March 21, 1927.
128A .....	July 16, 1926.
COAL DRILLS AND DRILLING MACHINES	
<i>Hand Drills</i>	
109 .....	September 19, 1922.
154 .....	August 1, 1928.
184 .....	February 7, 1930.
227 .....	July 29, 1931.
254 .....	July 15, 1933.
<i>Post Drills</i>	
119 .....	April 15, 1925.
119A .....	Do.
225 .....	July 10, 1931.
225A .....	Do.
228 .....	August 12, 1931.
228A .....	February 17, 1932.
230 .....	August 20, 1931.
230A .....	Do.
237 .....	December 1, 1931.
237A .....	Do.
<i>Drilling Machines</i>	
147 .....	February 8, 1928.
147A .....	Do.
176 .....	September 9, 1929.
176A .....	Do.
LOADING AND CONVEYING EQUIPMENT	
LOADING MACHINES	
<i>Unmounted Type</i>	
122 .....	January 8, 1926.
122A .....	Do.
<i>Caterpillar-Mounted Type</i>	
150 .....	May 11, 1928.
186 .....	March 15, 1930.