

§ 18.13

30 CFR Ch. I (7-1-05 Edition)

§ 18.13 Certification plate.

Each certified component shall be identified by a certification plate attached to the component in a manner acceptable to MSHA. The method of attachment shall not impair any explosion-proof characteristics of the component. The plate shall be of serviceable material, acceptable, to MSHA, and shall contain the following:

Certified as complying with the applicable requirements of 30 CFR part _____.
Certification No. _____.

The blank spaces shall be filled with appropriate designations. Inclusion of the information on a company name plate will be permitted provided the plate is made of material acceptable to MSHA.

§ 18.14 Identification of tested noncertified explosion-proof enclosures.

An enclosure that meets all applicable requirements of this part, but has not been certified by MSHA, shall be identified by a permanent marking on it in a conspicuous location. The design of such marking shall consist of capital letters USMSHA not less than ¼ inch in height, enclosed in a circle not less than 1 inch in diameter.

[33 FR 4660, Mar. 19, 1968, as amended at 43 FR 12314, Mar. 24, 1978] st

§ 18.15 Changes after approval or certification.

If an applicant desires to change any feature of approved equipment or a certified component, he shall first obtain MSHA's concurrence pursuant to the following procedure:

(a)(1) Application shall be made as for an original approval or letter of certification requesting that the existing approval or certification be extended to cover the proposed changes and shall be accompanied by drawings, specifications, and related information, showing the changes in detail.

(2) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval of changes to an approved or certified product under this part, the applicant must provide to MSHA as part of the approval application:

(i) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;

(ii) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(iii) Identification of components or features of the product that are critical to the safety of the product; and

(iv) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

(b) The application will be examined by MSHA to determine whether inspection or testing will be required. Testing will be required if there is a possibility that the change(s) may adversely affect safety.

(c) If the change(s) meets the requirements of this part, a formal extension of approval or certification will be issued, accompanied by a list of new or revised drawings, specifications, and related information to be added to those already on file for the original approval or certification.

(d) Revisions in drawings or specifications that do not involve actual change in the explosion-proof features of equipment may be handled informally.

[43 FR 12313, Mar. 24, 1978, as amended at 52 FR 17514, May 8, 1987; 68 FR 36419, June 17, 2003]

§ 18.16 Withdrawal of approval, certification, or acceptance.

MSHA reserves the right to rescind, for cause, any approval, certification, acceptance, or extension thereof, issued under this part.

Subpart B—Construction and Design Requirements

§ 18.20 Quality of material, workmanship, and design.

(a) Electrically operated equipment intended for use in coal mines shall be rugged in construction and shall be designed to facilitate inspection and maintenance.

(b) MSHA will test only electrical equipment that in the opinion of its qualified representatives is constructed

of suitable materials, is of good quality workmanship, based on sound engineering principles, and is safe for its intended use. Since all possible designs, circuits, arrangements, or combinations of components and materials cannot be foreseen, MSHA reserves the right to modify design, construction, and test requirements to obtain the same degree of protection as provided by the tests described in Subpart C of this part.

(c) Moving parts, such as rotating saws, gears, and chain drives, shall be guarded to prevent personal injury.

(d) Flange joints and lead entrances shall be accessible for field inspection, where practicable.

(e) An audible warning device shall be provided on each mobile machine that travels at a speed greater than 2.5 miles per hour.

(f) Brakes shall be provided for each wheel-mounted machine, unless design of the driving mechanism will preclude accidental movement of the machine when parked.

(g) A headlight and red light-reflecting material shall be provided on both front and rear of each mobile transportation unit that travels at a speed greater than 2.5 miles per hour. Red light-reflecting material should be provided on each end of other mobile machines.

§ 18.21 Machines equipped with powered dust collectors.

Powered dust collectors on machines submitted for approval shall meet the applicable requirements of Part 33 of this chapter (Bureau of Mines Schedule 25B), and shall bear the approval number assigned by MSHA.

§ 18.22 Boring-type machines equipped for auxiliary face ventilation.

Each boring-type continuous-mining machine that is submitted for approval shall be constructed with an unobstructed continuous space(s) of not less than 200 square inches total cross-sectional area on or within the machine to which flexible tubing may be attached to facilitate auxiliary face ventilation.

§ 18.23 Limitation of external surface temperatures.

The temperature of the external surfaces of mechanical or electrical components shall not exceed 150 °C. (302 °F.) under normal operating conditions.

§ 18.24 Electrical clearances.

Minimum clearances between uninsulated electrical conductor surfaces, or between uninsulated conductor surfaces and grounded metal surfaces, within the enclosure shall be as follows:

MINIMUM CLEARANCES BETWEEN UNINSULATED SURFACES

Phase-to-Phase Voltage (rms)	Clearances (inches)	
	Phase-to-Phase	Phase-to-Ground or Control Circuit
0 to 250	0.25	0.25
251 to 600	0.28	0.25
601 to 1000	0.61	0.25
1001 to 2400	1.4	0.6
2401 to 4160	3.0	1.4

[57 FR 61209, Dec. 23, 1992]

§ 18.25 Combustible gases from insulating material.

(a) Insulating materials that give off flammable or explosive gases when decomposed electrically shall not be used within enclosures where the materials are subjected to destructive electrical action.

(b) Parts coated or impregnated with insulating materials shall be heat-treated to remove any combustible solvent(s) before assembly in an explosion-proof enclosure. Air-drying insulating materials are excepted.

§ 18.26 Static electricity.

Nonmetallic rotating parts, such as belts and fans, shall be provided with a means to prevent an accumulation of static electricity.

§ 18.27 Gaskets.

A gasket(s) shall not be used between any two surfaces forming a flame-arresting path except as follows:

(a) A gasket of lead, elastomer, or equivalent will be acceptable provided the gasket does not interfere with an acceptable metal-to-metal joint.