

## § 18.94

and safe for its intended use, the Coal Mine Health and Safety District Manager shall so advise the applicant in writing, setting forth the reasons for his denial of the application, and where applicable, the deficiencies in the machine which rendered it unsuitable or unsafe for use.

(3) Rejected applications, together with attached photographs, drawings, specifications and descriptions shall be forwarded by the Coal Mine Health and Safety District Manager to Approval and Certification Center which shall record all pertinent data with respect to the machine for which field approval was sought.

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

### § 18.94 Application for field approval; contents of application.

(a) Each application for field approval shall, except as provided in § 18.93(b), include the following information with respect to the electrically operated machine for which field approval is sought:

(1) The trade name and the certification number or other means of identifying any explosion-proof compartment or intrinsically-safe component installed on the machine for which a prior approval or certification has been issued under the provisions of Bureau of Mines Schedules 2D, 2E, 2F, or 2G.

(2) The trade name and the flame-resistance acceptance or approval number of any cable, cord, hose, or conveyor belt installed on the machine for which prior acceptance or approval by MSHA has been issued.

(b) Each application for field approval shall be accompanied by:

(1) If the machine is constructed or assembled entirely from components which have been certified or removed from machines approved under Bureau of Mines Schedule 2D, 2E, 2F, or 2G, photographs or a single layout drawing which clearly depicts and identifies each of the permissible components and its location on the machine.

(2) If the machine contains one or more components required to be permissible which has not been approved or certified under Bureau of Mines Schedule 2D, 2E, 2F, or 2G, a single layout drawing which clearly identifies all

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of the components from which it was assembled.

(3) All applications shall include specifications for:

(i) Overcurrent protection of motors;

(ii) All wiring between components, including mechanical protection such as hose conduit and clamps;

(iii) Portable trailing cable for use with the machine, including the type, length, diameter, and number and size of conductors;

(iv) Insulated strain clamp for machine end of portable trailing cable;

(v) Short-circuit protection to be provided at outby end of portable trailing cable.

[33 FR 4660, Mar. 19, 1968, as amended at 57 FR 61223, Dec. 23, 1992]

### § 18.95 Approval of machines constructed of components approved, accepted or certified under Bureau of Mines Schedule 2D, 2E, 2F, or 2G.

Machines for which field approval is sought which are constructed entirely from properly identified components that have been investigated and accepted or certified for applications on approved machines under the Bureau of Mines Schedule 2D, 2E, 2F, or 2G, shall be approved following a determination by the electrical representative that the construction of the entire machine is permissible and conforms to the data submitted in accordance with § 18.94.

### § 18.96 Preparation of machines for inspection; requirements.

(a) Upon receipt of written notice from the Health and Safety District Manager of the time and place at which a field approval investigation will be conducted with respect to any machine, the applicant will prepare the machine for inspection in the following manner:

(1) The machine shall be in fresh air out by the last open crosscut and free from obstructions, or, if the machine is located on the surface, moved to a clear area;

(2) All enclosure covers shall be removed;

(3) The flanges and interior of each enclosure, including the cover, shall be cleaned thoroughly;

(4) All hoses, cables, cord, and conveyor belts shall be wiped clean to expose surface markings;

(5) All electrical components shall be cleaned to reveal all stampings, identification plates, certification numbers, or explosion test markings.

**§ 18.97 Inspection of machines; minimum requirements.**

(a) Except as provided in § 18.95, all machines approved under the provisions of this subpart E shall, where practicable, meet the minimum design and performance requirements set forth in subpart B of this part 18 and, where necessary, the requirements of § 18.98.

(b) The inspection of each machine shall be conducted by an electrical representative and such inspection shall include:

(1) Examination of all electrical components for materials, workmanship, design, and construction;

(2) Examination of all components of the machine which have been approved or certified under Bureau of Mines Schedule 2D, 2E, 2F, or 2G to determine whether such components have been maintained in permissible conditions;

(3) Comparison of the location of components on the machine with the drawings or photographs submitted to determine that each of them is properly located, identified and marked;

(4) Pressure testing of explosion-proof compartments, when necessary, shall be conducted in accordance with § 18.98; and:

(i) Where the results of pressure testing are acceptable, the applicant shall be advised;

(ii) Where the explosion-proof enclosure is found unacceptable, the applicant shall be so informed;

(iii) If the performance of the explosion-proof enclosure is questionable, the qualified electrical representative may, at the request of the applicant, conduct a further detailed examination of the enclosure after disassembly and record his additional findings on MSHA Form No. 6-1481 under Results of Field Inspections.

[33 FR 4660, Mar. 19, 1968, as amended at 42 FR 8373, Feb. 10, 1977]

**§ 18.98 Enclosures, joints, and fastenings; pressure testing.**

(a) Cast or welded enclosures shall be designed to withstand a minimum internal pressure of 150 pounds per square inch (gage). Castings shall be free from blowholes.

(b) Pneumatic field testing of explosion-proof enclosures shall be conducted by determining:

(1) Leak performance with a peak dynamic or static pressure of 150 pounds per square inch (gage); or

(2) A pressure rise and rate of decay consistent with unyielding components during a pressure-time history as derived from a series of oscillograms.

(c) Welded joints forming an enclosure shall have continuous gastight welds.

**§ 18.99 Notice of approval or disapproval; letters of approval and approval plates.**

Upon completion of each inspection conducted in accordance with § 18.97(b), the electrical representative conducting such inspection shall record his findings with respect to the machine examined on MSHA Form No. 6-1481 together with his recommendation of approval or disapproval of the machine.

(a) If the qualified electrical representative recommends field approval of the machine, the Coal Mine Health and Safety District Manager shall forward the completed application form together with all attached photographs, drawings, specifications, and descriptions to Approval and Certification Center. Approval and Certification Center shall record all pertinent data with respect to such machine, issue a letter of approval with a copy to the Coal Mine Health and Safety District Manager who authorized its issuance and send the field approval plate to the applicant. The approval plate shall be affixed to the machine by the applicant in such a manner so as not to impair its explosion-proof characteristics.

(b) If the electrical representative recommends disapproval of the machine, he shall record the reasons for such disapproval and the Coal Mine Health and Safety District Manager