

(b) Time constant of the circuit (defined as  $T=L/R$ , where T is the time in seconds, L is the inductance in henries, and R is the resistance in ohms) shall be as follows:

(1) For 10,000 amperes and greater currents,  $T=0.016$  second or more;

(2) For 1,000 amperes to 10,000 amperes,  $T=0.008$  second or more;

(3) For 100 amperes to 1,000 amperes,  $T=0.006$  second or more; and

(4) For less than 100 amperes,  $T=0.002$  seconds or more.

(c) Test currents shall be as follows:

(1) 200 percent of rated current for fuses having 200 or less ampere rating, or 300 percent of rated current for fuses having greater than 200 ampere rating;

(2) 900 percent of rated current;

(3) 10,000 amperes; and

(4) 20,000 amperes.

(d) The voltage shall continue to be applied for at least 30 seconds after completion of circuit interruption.

(e) Five fuses of each case size shall be tested at each test current specified in paragraph (c) of this section, with the value of the fuse being the maximum value for the case size.

(f) Three of each lot of five fuses shall be preconditioned at  $95\pm 5$  percent RH for not less than 5 days immediately prior to testing; and the other two fuses of each lot of five shall be preconditioned by heating to  $90^\circ\text{C}$ . for 24 hours, and tested within 1 hour after removal from the preconditioning chamber.

(g) At least three of each lot of five fuses shall be tested in a fuse holder of a trolley-tap type, and the fuse holder shall remain intact and shall readily accept and retain a replacement fuse.

## PART 33—DUST COLLECTORS FOR USE IN CONNECTION WITH ROCK DRILLING IN COAL MINES

### Subpart A—General Provisions

- Sec.
- 33.1 Purpose.
- 33.2 Definitions.
- 33.3 Consultation.
- 33.4 Types of dust collectors for which certificates of approval may be granted.
- 33.5 [Reserved]
- 33.6 Applications.
- 33.7 Date for conducting tests.
- 33.8 Conduct of investigations, tests, and demonstrations.

33.9 Certification of dust-collecting systems.

33.10 Certificates of approval or performance.

33.11 Approval plates.

33.12 Changes after certification.

33.13 Withdrawal of certification.

### Subpart B—Dust-Collector Requirements

33.20 Design and construction.

33.21 Modification of test equipment.

33.22 Mode of use.

33.23 Mechanical positioning of parts.

### Subpart C—Test Requirements

33.30 Test site.

33.31 Test space.

33.32 Determination of dust concentration.

33.33 Allowable limits of dust concentration.

33.34 Drilling test.

33.35 Methods of drilling; dust-collector unit.

33.36 Method of drilling; combination unit or dust-collecting system.

33.37 Test procedure.

33.38 Electrical parts.

AUTHORITY: 30 U.S.C. 957, 961.

SOURCE: Schedule 25B, 25 FR 6473, July 9, 1960, unless otherwise noted.

### Subpart A—General Provisions

#### § 33.1 Purpose.

The regulations in this part set forth the requirements for dust collectors used in connection with rock drilling in coal mines to procure their certification as permissible for use in coal mines; procedures for applying for such certification; and fees.

#### § 33.2 Definitions.

As used in this part:

(a) *Permissible*, as applied to a dust collector, means that it conforms to the requirements of this part, and that a certificate of approval to that effect has been issued.

(b) *Bureau* means the United States Bureau of Mines.

(c) *Certificate of approval* means a formal document issued by MSHA stating that the dust collector unit or combination unit has met the requirements of this part, and authorizing the use and attachment of an official approval plate or a marking so indicating.

(d) *Certificate of performance* means a formal document issued by MSHA stating that a dust-collecting system has met the test requirements of Subpart C of this part and therefore is suitable for use as part of permissible units.

(e) *Dust-collector unit* means a complete assembly of parts comprising apparatus for collecting the dust that results from drilling in rock in coal mines, and is independent of the drilling equipment.

(f) *Combination unit* means a rock-drilling device with an integral dust-collecting system, or mining equipment with an integral rock-drilling device and dust-collecting system.

(g) *Dust-collecting system* means an assembly of parts comprising apparatus for collecting the dust that results from drilling in rock and is dependent upon attachment to other equipment for its operation.

(h) *Applicant* means an individual, partnership, company, corporation, association, or other organization that designs and manufactures, assembles or controls the assembly of a dust-collecting system, dust-collector unit, or a combination unit, and seeks certification thereof.

(i) *MSHA* means the United States Department of Labor, Mine Safety and Health Administration.

[Sched. 25B, 25 FR 6473, July 9, 1960, as amended at 39 FR 24005, June 28, 1974; 43 FR 12317, Mar. 24, 1978]

**§ 33.3 Consultation.**

By appointment, applicants or their representatives may visit Approval and Certification Center, Box 201B Industrial Park Road, Dallas Pike, Triadelphia, W. Va. 26059, and discuss with qualified Bureau representative proposed designs of equipment to be submitted in accordance with the requirements of the regulations of this part. No charge is made for such consultation and no written report thereof will be submitted to the applicant.

[Sched. 25B, 25 FR 6473, July 9, 1960, as amended at 43 FR 12317, Mar. 24, 1978]

**§ 33.4 Types of dust collectors for which certificates of approval may be granted.**

(a) Certificates of approval will be granted only for completely assembled

dust-collector or combination units; parts or subassemblies will not be approved.

(b) The following types of equipment may be approved: Dust-collector or combination units having components designed specifically to prevent dissemination of airborne dust generated by drilling into coal-mine rock strata in concentrations in excess of those hereinafter stated in § 33.33 as allowable, and to confine or control the collected dust in such manner that it may be removed or disposed of without dissemination into the mine atmosphere in quantities that would create unhygienic conditions.

**§ 33.5 [Reserved]**

**§ 33.6 Applications.**

(a) No investigation or testing will be undertaken by MSHA except pursuant to a written application, in duplicate (except as otherwise provided in paragraph (e) of this section), accompanied by a check, bank draft, or money order, payable to the U.S. Mine Safety and Health Administration, to cover the fees; and all prescribed drawings, specifications, and all related materials. The application and all related matters and all correspondence concerning it shall be sent to the Approval and Certification Center, Box 201 B, Industrial Park Road, Dallas Pike, Triadelphia, W. Va. 26059.

(b) The application shall specify the operating conditions (see § 33.22) for which certification is requested.

(c) Shipment of the equipment to be tested shall be deferred until MSHA has notified the applicant that the application will be accepted. Shipping instructions will be issued by MSHA and shipping charges shall be prepaid by the applicant. Upon completion of the investigation and notification thereof to the applicant by MSHA, the applicant shall remove his equipment promptly from the test site (see § 33.30).

(d) Drawings and specifications shall be adequate in number and detail to identify fully the design of the unit or system and to disclose its materials and detailed dimensions of all component parts. Drawings must be numbered and dated to insure accurate identification and reference to records,