§ 18.69 Adequacy tests.

MSHA reserves the right to conduct appropriate test(s) to verify the adequacy of equipment for its intended service.

Subpart D—Machines Assembled With Certified or Explosion-Proof Components, Field Modifications of Approved Machines, and Permits To Use Experimental Equipment

§ 18.80 Approval of machines assembled with certified or explosion-proof components.

(a) A machine may be a new assembly, or a machine rebuilt to perform a service that is different from the original function, or a machine converted from nonpermissible to permissible status, or a machine converted from direct- to alternating-current power or vice versa. Properly identified components that have been investigated and accepted for application on approved machines will be accepted in lieu of certified components.

(b) A single layout drawing (see Figure 1 in Appendix II) or photographs will be acceptable to identify a machine that was assembled with certified or explosion-proof components. The following information shall be furnished:

(1) Overall dimensions.
(2) Wiring diagram.
(3) List of all components (see Figure 2 in Appendix II) identifying each according to its certification number or the approval number of the machine of which the component was a part.

(d) The design of intrinsically safe circuits shall preclude extraneous voltages caused by insufficient isolation or inductive coupling. The investigation shall determine the effect of ground faults where applicable.

(e) Identification markings: Circuits and components of intrinsically safe equipment and devices shall be adequately identified by marking or labeling. Battery-powered equipment shall be marked to indicate the manufacturer, type designation, ratings, and size of batteries used.
§ 18.81 Field modification of approved (permissible) equipment; application for approval of modification; approval of plans for modification before modification.

(a) An owner of approved (permissible) equipment who desires to make modifications in such equipment shall apply in writing to make such modifications. The application, together with the plans of modifications, shall be filed with the U.S. Department of Labor, Mine Safety and Health Administration, Approval and Certification Center, 765 Technology Drive, Triadelphia, WV 26059.

(b) Proposed modifications shall conform with the applicable requirements of subpart B of this part, and shall not substantially alter the basic functional design that was originally approved for the equipment.

(c) Upon receipt of the application for modification, and after such examination and investigation as may be deemed necessary by MSHA, MSHA will notify the owner and the District office of the mine workers’ organization having jurisdiction at the mine where such equipment is to be operated, stating the modifications which are proposed to be made and MSHA’s action thereon.

§ 18.82 Permit to use experimental electric face equipment in a gassy mine or tunnel.

(a) Application for permit. An application for a permit to use experimental electric face equipment in a gassy mine or tunnel will be considered only when submitted by the user of the equipment. The user shall submit a written application to the Assistant Secretary of Labor for Mine Safety and Health, 1100 Wilson Blvd., Room 2322, Arlington, Virginia 22209–3939, and send a copy to the U.S. Department of Labor, Mine Safety and Health Administration, Approval and Certification Center, 765 Technology Drive, Triadelphia, WV 26059.

(b) Requirements—(1) Constructional.

(i) Experimental equipment shall be so constructed that it will not constitute a fire or explosion hazard.

(ii) Enclosures designed as explosion-proof, unless already certified, or components of previously approved (permissible) machines, shall be submitted to MSHA for inspection and test and shall meet the applicable design requirements of subpart B of this part. Components designed as intrinsically safe also shall be submitted to MSHA for investigation.

(iii) MSHA may, at its discretion, waive the requirements for detailed drawings of component parts, inspections, and tests provided satisfactory evidence is submitted that an enclosure has been certified, or otherwise accepted by a reputable testing agency whose standards are substantially equivalent to those set forth in subpart B of this part.

(2) Specifications. The specifications for experimental equipment shall include a layout drawing (see Figure 1 in Appendix II) or photograph(s) with the components, including overcurrent-protective device(s) with setting(s) identified thereon or separately; a wiring diagram; and descriptive material necessary to insure safe operation of the equipment. Drawings already filed with MSHA need not be duplicated by the applicant, but shall be properly identified.

(c) Final inspection. Unless equipment is delivered to MSHA for investigation, the applicant shall notify the U.S. Department of Labor, Mine Safety and Health Administration, Approval and Certification Center, 765 Technology Drive, Triadelphia, WV 26059, when and where the experimental equipment will be ready for inspection by a representative of MSHA before installing it on a trial basis. Such inspection shall be completed before a permit will be issued.