

PERMISSIBLE MINE EQUIPMENT APPROVED DURING 1957-58

By E. J. Gleim and F. R. Lee

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PERMISSIBLE MINE EQUIPMENT APPROVED
DURING 1957-58^{1/}

With Appended Lists of Manufacturers of Flame-Resistant
Trailing Cables and Fire-Resistant Conveyor Belts, and Holders of "Permits"

by

E. J. Gleim^{2/} and F. R. Lee^{3/}

INTRODUCTION

In keeping with past custom, it is the purpose of this publication to bring up to date previously published lists of equipment that meets safety standards of the Bureau of Mines so that the mining industry may be informed as to the development and availability of equipment that can be used safely.

The present lists supplement those in Bulletin 543, Permissible Mine Equipment Approved to January 1, 1953; Information Circular 7722, Permissible Equipment Approved During the Calendar Years 1953-54; and Information Circular 7840, Permissible Equipment Approved During the Calendar Years 1955-56. These new lists also contain equipment meeting those standards revised since the last listing. A revision of Schedule 16C (now Schedule 16D^{4/}) was officially approved on September 28, 1958. Schedule 29 was another standard revised in 1958. The revision was officially approved on September 8, 1958, and is known as Schedule 29A^{5/}.

As in Bulletin 543, the items (with original item numbers) in each category are listed chronologically to indicate the order in which the approvals were issued. In several instances a date earlier than 1957 covers the original approval; the second date is that of an extension of approval covering equipment of a different voltage than that covered by the original approval.

Since 1 year or more may elapse between formal publication of these lists of equipment, persons interested in keeping up to date on current approvals may do so by referring to Coal Age and Mechanization, monthly magazines issued by the McGraw-Hill Publishing Co. and Mechanization, Inc., respectively.

The list of flame-resistant trailing cables published in Information Circular 7840 has been enlarged since that circular was issued. Appendix 1 gives

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- 1/ Work on manuscript completed September 1959.
 - 2/ Former chief, Branch of Electrical-Mechanical Testing, Bureau of Mines, Pittsburgh, Pa.
 - 3/ Supervisory electrical engineer, Bureau of Mines, Pittsburgh, Pa.
 - 4/ Multiple-Shot Blasting Units.
 - 5/ Lighting Equipment for Illuminating Underground workings.

the complete list as of December 31, 1958. In like manner, appendix 2 gives a complete list of manufacturers of fire-resistant conveyor belts.

Investigation of mining equipment over the years showed instances when it became desirable to build a machine on an experimental basis, so that necessary changes in design could be made during the trial period, before submitting the machine for official approval. Schedule 2F outlines the conditions under which an experimental machine may be examined and authorized before permitting its operation underground in a gassy mine. This is done by issuing a permit. The schedule defines "permit" as follows:

A special written certificate of authorization prescribing the conditions under which a machine built or purchased for experimental purposes may be operated in a gassy mine.

Appendix 3 lists those permits issued up to December 31, 1958.

MOTOR-DRIVEN MINE EQUIPMENT

(Approved under Schedules 2, 2A, 2B, 2C, 2D, 2E, and 2F)

Air Compressors

58. Type 5601 air compressor; motor, 70-hp., 250-volt, d.-c. Approval 2-1256 issued to the Goodman Manufacturing Co., May 22, 1957.
59. Model 275-A4J air compressor; motor, 75-hp., 230-volt, d.-c. Approval 2-1260 issued to the Acme Machinery Co., June 19, 1957.
60. Model 275-T air compressor; motor, 65-hp., 250-volt, d.-c. Approval 2-1266 issued to the Acme Machinery Co., June 25, 1957.
61. Air compressor; motor, 70-hp., 550-volt, d.-c. Approval 2-1287A issued to the Rochester & Pittsburgh Coal Co., September 16, 1957.
62. Model 275-TAC air compressor; motor, 75-hp., 550-volt, a.-c. Approval 2-1310A issued to the Acme Machinery Co., November 12, 1957.
63. Model 275-A4JS air compressor; motor, 75-hp., 230-volt, d.-c. Approval 2-1317 issued to the Acme Machinery Co., December 11, 1957.
64. Model 275-A4JC air compressor; motor, 75-hp., 440-volt, a.-c. Approval 2-1335A issued to the Acme Machinery Co., February 18, 1958.
65. Model 275-A4JR air compressor; motor, 60-hp., 230-volt, d.-c. Approval 2-1356 issued to the Acme Machinery Co., April 29, 1958.
66. Type WBH air compressor; motor, 75-hp., 250-volt, d.-c. Approval 2-1359 issued to the Gardner-Denver Co., May 7, 1958.

APPENDIX 1
Manufacturers of Flame-Resistant Trailing Cables

Manufacturer	<u>Symbol</u>
1. Simplex Wire & Cable Co.....	101-BM
2. Anaconda Wire & Cable Co.....	102-BM
3. Kaiser Aluminum & Chemical Corp. (formerly United States Rubber Co.).....	103-BM
4. The Okonite Co. (Hazard Insulated Wire Works Div.).....	104-BM
5. Rome Cable Corp.....	105-BM
6. National Electric Products Corp.....	106-BM
7. Collyer Insulated Wire Co.....	107-BM
8. General Electric Co.....	108-BM
9. American Steel & Wire Co.....	109-BM
10. General Cable Corp.....	110-BM
11. John A. Roebling's Sons Corp.....	111-BM
12. Circle Wire & Cable Corp.....	115-BM
13. Western Insulated Wire Co.....	116-BM
14. Cornish Wire Co., Inc.....	117-BM
15. Whitney Blake Co.....	118-BM
16. Walker Brothers.....	119-BM
17. Continental Copper & Steel Industries, Inc. (Hatfield Wire & Cable Div.).....	120-BM
18. Diamond Wire & Cable Co.....	121-BM
19. Royal Electric Co.....	122-BM
20. Carol Cable Co. (Division of Crescent Co., Inc.).....	123-BM
21. Plastic Wire & Cable Corp.....	124-BM

APPENDIX 1 (Con.)
Manufacturers of Flame-Resistant Trailing Cables (Con.)

	Manufacturer	<u>Symbol</u>
22.	Essex Wire Corp.....	125-BM
23.	Northern Electric Co., Ltd.....	126-BM

APPENDIX 2
Manufacturers of Fire-Resistant Conveyor Belts

Manufacturer	<u>Acceptance No.</u>
1. Scandinavia Belting Co.....	U.S.B.M. 28-1
2. Hewitt Robins, Inc.....	U.S.B.M. 28-2
3. The Goodyear Tire & Rubber Co.....	U.S.B.M. 28-3
4. Republic Rubber Div., Lee Tire & Rubber Co.....	U.S.B.M. 28-4
5. United States Rubber Co.....	U.S.B.M. 28-5
6. B. F. Goodrich Co.....	U.S.B.M. 28-6
7. Hamilton Rubber Manufacturing Corp.....	U.S.B.M. 28-7
8. Goodall Rubber Co.....	U.S.B.M. 28-8
9. Boston Woven Hose & Rubber Co.....	U.S.B.M. 28-9
10. Raybestos-Manhattan, Inc.....	U.S.B.M. 28-10
11. Quaker Rubber Corp.....	U.S.B.M. 28-11
12. Cincinnati Rubber Manufacturing Co.....	U.S.B.M. 28-12
13. Thermoid Co.....	U.S.B.M. 28-13
14. New York Rubber Corp.....	U.S.B.M. 28-14
15. Dunlop-Canada, Ltd.....	U.S.B.M. 28-15
16. Gutta Percha & Rubber, Ltd. (Canada).....	U.S.B.M. 28-16
17. Mercer Rubber Co.....	U.S.B.M. 28-17
18. The American Rubber Manufacturing Co.....	U.S.B.M. 28-18
19. M. Rost & Co. (Germany).....	U.S.B.M. 28-19
20. Dominion Rubber Co., Ltd. (Canada).....	U.S.B.M. 28-20
21. Home Rubber Co.....	U.S.B.M. 28-21
22. Carideng (Belgium).....	U.S.B.M. 28-22

APPENDIX 2 (Con.)
Manufacturers of Fire-Resistant Conveyor Belts (Con.)

Manufacturer	<u>Acceptance No.</u>
23. Conti Rubber Co.....	U.S.B.M. 28-23
24. Paltech Co.....	U.S.B.M. 28-24
25. The Russell Manufacturing Co.....	U.S.B.M. 28-25