



MEMO TO: J. F. S. Abbott

April 9, 1959

FROM: R. E. Wing

cc: Messrs:

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SUBJECT: EP 554 - Flame Test Performance of Silicone Rubber Asbestos Braided Power Cables

In the course of running tests on samples of early production cable of this category, it was discovered by R & D that flame test performance to the Underwriters' Vertical Flame Test requirement was not all it should be, with approximately 1/3 of the material failing to meet the requirement. Further testing was conducted, and an evaluation of various means of preventing the failures was made. During the investigation 61 specimens of regular production material and specimens braided with the same coverage (64%) as regular production material were tested, with 23 failures reported. Higher coverages of approximately 67% and 75% showed significant improvement with zero failures in 20 tests at 75% and 4 failures in 38 tests at 67% coverage.

In view of the above experience, in order to obtain equivalent flame test performance of the #14 cable to the other sizes in the line, I requested a change in specification to 67.7% braid coverage which was written up on March 19, 1959.

rs.

R. E. Wing

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