WIRE AND CABLE

Testing for Power and Signaling Cables Used in Mines

UL Melville Becomes Wire & Cable Center for Excellence - Now Offering Flame Testing for Mining Cables in Accordance with the Mine Safety and Health Administration (MSHA)

Do you have the need to evaluate your cables to the MSHA specifications but lack the appropriate test facilities? If so, UL is here to help.

UL is pleased to announce that we have been successfully evaluated by the Mine Safety and Health Administration (MSHA) to act as a third-party test lab to perform testing to the Code of Federal Regulations (CFR) Title 30, Part 7:

- 7.407: Test for flame resistance of electric cables and cable splices
- 7.408: Test for flame resistance of signaling cables

This test is very similar to the FT5 test required for the certification of some portable power cables used in Canada.

Portable Power Cables covered under the CCN QPMU are those that are typically used in mining applications. In addition to the cables used to power equipment within the mines, signaling cables such as communications cables (DUZX), power-limited circuit cables (QPTZ) and optical fiber cables (QAYK) also require evaluation. Before these types of cables can be used in such applications, they must be approved by MSHA. MSHA assigns an approval number, but does not provide the test facilities to perform the required flame test. A manufacturer may choose to have his own facilities evaluated by MSHA, or may choose to have the testing performed by UL, as an approved third-party test facility.

The flame test is a horizontal burn test that uses a Bunsen-burner flame 5 inches total in height with a three inch inner blue cone. The flame is applied to the specimen for 60 seconds. After removal of the flame, the duration of burning shall not exceed 240 seconds and the charred area shall not exceed 6 inches. In the case of the power cables, five-times (5X) rated current is applied to the cable until the temperature reaches 400°F before the flame is applied.

Program Benefits

- Gain recognition through UL's trusted testing service
- Utilize UL's expert test technicians and facilities
- Quick turn-around time for test report
- Available option to integrate with other global testing and certification requirements under UL's one-stop solution service
- No need to invest in establishing and maintaining in-house test facilities

For more information, please contact: wirequote@ul.com