

Score a TD over MINE FIRES!



BELT FIRE SUPPRESSION SIMULATOR

Scoring a TD or touchdown is the goal of every football team. Fires at underground belt drives (UBD) and battery charging stations (BCS) can be defeated with a “TD”, that is good Training and proper Design. Proper design of fire suppression systems (FSS) and noncombustible structures and areas (NCSA) is the first step. A proper design uses fire science principles to optimize: fire detection, activation time, pressure and flow, system reliability, thermal barrier performance, manual fire fighting, ventilation, etc. This is important because FSS and NCSA are designed to provide protection after a flaming fire exists. Fires at UBD and BCS can reach thousands of degrees Fahrenheit. The history of fires and large scale fire tests have shown that FSS activation times of 13 to 36 minutes after ignition are common. Secondly, proper training is critical to ensure FSS and NCSA are properly installed, tested, and maintained. Remember, fire science is not common sense.

Best Practices

1. Design fire suppression systems that comply with 30 CFR and NFPA 13, 13A, 15, and 17.
2. Consult with a fire protection engineer on your design prior to installation.
3. Ensure FSS and NCSA have components that have passed large scale fire tests, are approved or listed by a nationally recognized independent testing laboratory, where applicable, and are rated for their intended use.
4. Train miners on the design, installation, testing, and maintenance provisions of 30 CFR and NFPA 13, 13A, 15, and 17.

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