

Lithium BESS USSC Australia

Our distributor USSC Australia was founded in 2004 as Firestorm and was acquired by United Safety (USSC) in 2019. They are providing safety and protection equipment across many product lines and segments. The AF-X Fireblocker is one of their leading products in the big Mining Industry of Australia.

Challenges

As the energy transition goes on, the storage of energy brings certain risks with it. Providing safe storage is becoming more and more the standard as companies are increasing the usage of lithium batteries to power their tools or to store the energy they have raised with solar panels. Lithium remains a difficult substance to suppress or extinguish.

The job

USSC has installed AF-X Fire suppressing systems in multiple 500KW Energy Storage Hi-Cube Units. These units are advanced energy storage systems that provide diesel-free power for the next generation of construction projects.



In this project, two separate areas are protected: a Battery Storage Compartment and an Electrical & Control Compartment. USSC has chosen different sizes of Fireblockers to best accommodate each compartment. The fire extinguishing system is equipped with smoke and optical detection, a DECU3-panel, an external strobe and sounder, and a key isolate switch. Compact, modular, and low maintenance in combination with a long lifespan (15 years) were the drivers to choose for AF-X Fireblocker.

Compact and lightweight

The volume of the BESS systems is limited so there is not much space for a fire-suppressing system. With its modular system and different sizes, the AF-X Fireblockers in combination with a small detection panel is the obvious choice, is easy to install and replace and therefore ensures operational continuity.





Tested and Certified

The AF-X Fireblocker has been tested for effectiveness in suppressing Lithium battery fires. These tests have been successfully performed and documented in collaboration with the Peutz fire laboratory and KIWA. The extensive test reports and KIWA Certificate can be requested.

Main conclusions from the KIWA-certificate K-0210557/01, which is tested in accordance with BRL-K21045 and the Specific Certification Program 05 for Fire Protection of Lithium-ion batteries storage:

- Significant and rapid temperature reduction
- Major control phase of the Thermal Runaway with a suppression of minimal 90 minutes
- Batteries up until 160AH - 48V
- Creating a stable situation in a lithium-ion battery storage (BESS). No spread of fire to surrounding batteries.

Prevent fire with AF-X Fireblocker.

Fire causes enormous damage. Most fires develop from a short circuit in, or overtaxing of engines, batteries, or equipment. Unseen, Unnoticed, Undiscovered until late, and more often than not, even far too late. AF-X Fireblocker is one of the few systems that operate from within and blocks the fire directly on the spot that until now could not be protected: right at the seat of the fire.

Built-in fireman

Originally developed for space travel, AF-X Fireblocker serves as a built-in fireman and swiftly blocks the fire with a dry aerosol compound. From the very first spark. Without using water, Completely harmless to man, beast and the environment, and with no threat to business continuity. Low purchasing costs, low installation costs, and low maintenance costs. No need for constructional provisions. Long life. No consequential loss. In other words: an annual cost saving of many, many euros.

af-x fireblocker | faster than fire.