



# MININGShield

The ultimate fire protection solutions for the harsh conditions of mining applications

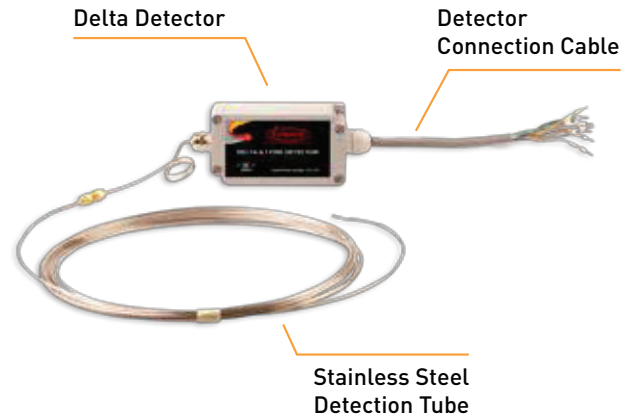


Advanced fire protection systems

# MININGShield

Protecting property and lives are paramount. That's why, in all mining scenarios, the elapsed time between the onset of a fire and its detection is critical! Lehavot's MININGShield pre-engineered system is designed to cope with the most severe under-or above-ground fire challenges, based on:

- Lehavot's DELTA detector - a RoR linear fire & heat detector. The world's most reliable fire detection device, which monitors rate-of-temperature rise via stainless steel tubing that is routed within the protected zone, providing optimal fire and overheating detection coverage.
- Lehavot's CCU (Central Control Unit), which can monitor dozens of Delta detectors and activate cylinders with any type of agent.
- Lehavot's FPS (Fire Protection System)-Manager Software, for easy system monitoring and control of the entire fire protection system.



## Key MININGShield Applications



**Heavy-Duty Mining Vehicles :** When you combine 24/7 operation, heat, flammable liquids, turbo chargers, exhaust fumes & electrical components in the enclosed space of the engine compartment, the risk of furious fire is high. **The MININGShield vehicle AFSS pre-engineered fire suppression system** is comprised of three major components: the DELTAdetector, suppression cylinder (any type of agent) and CCU.



**Above-and Under-Ground Conveyor Belts :** The continuous friction between the conveyor's belt itself and its rotating pulleys can produce static electricity and/or high temperatures both of which pose serious fire threats in a mine's typically combustible environment. A furious conveyor belt fire can spread rapidly over long distances. **The MININGShield conveyor belt AFSS pre-engineered fire suppression system** is comprised of: CCU (which can monitor a large number of detectors); multiple DELTA detectors; discharging elements; and extinguishing agent optimized for mine conveyor belt conditions.



**Diesel Storage Units:** With their high loading of combustible materials, diesel storage areas – often underground and unattended – must be protected with a rapid-response and reliable fire protection system. **The MININGShield diesel storage AFSS pre-engineered fire suppression system** is comprised of: a DELTA detector; automatic and/or manual fire suppression actuation device; extinguishing agent optimized for diesel fires.



**Battery Charging Stations:** The battery chargers used in mines can be quite dangerous. Overcharging may cause the battery to rupture and the electrolyte fluid is highly flammable. Any ignition source could cause a fire and even an explosion. **The MININGShield battery charging station AFSS pre-engineered fire suppression system** is comprised of: a DELTA detector; automatic and/or manual fire suppression actuation device; extinguishing agent optimized for battery fires.

## Features and Benefits:

- Fast Detection – Rapidly detects fires, minimizing damage and injuries.
- Extremely Reliable – Low rate of false alarms.
- Distant Sensing – Identifies fires occurring a considerable distance from the sensor tubing, does not require line-of-sight to the fire.
- Audio and Visual Indications – Combines integrated detection and control capabilities
- Performance Monitoring – Advanced module that indicates failure or alarm.
- Low Cost of Ownership – Relatively low cost, low maintenance, and low power consumption.
- Easy Installation – The Delta stainless steel tubing can be routed to monitor large areas or confined spaces.
- Documentation – Fire events, faults and signal peaks are stored in the detector's Non-Volatile Memory and can be downloaded at any time through a USB interface.



## Certifications:

- ISO 9001:2008 – Quality assurance certification
- FM-APPROVED
- MIL-STD 810 – For environmental conditions
- MIL-STD 1275 – For Characteristics of 28V DC electrical systems in military vehicles
- MIL-STD 461 – For electromagnetic compatibility
- EN 54-5 – Certified Emergency Voice Alarm



ISO 9001:2008



FM-APPROVED



Military Std 810



Military Std 1275



Military Std 461



EN 54 Certified  
Emergency  
Voice Alarm





## Lehavot Advanced Fire Protection Systems

With more than 60 years of know-how in fire protection technology, LEHAVOT is a leading global supplier of the most advanced fire detection and suppression systems in the world. Our best-of-breed solutions are based on cutting-edge in-house R&D, such as the revolutionary DELTA pneumatic-electronic linear fire and heat detector.

LEHAVOT's products and systems meet the unique needs of a wide range of sectors including:



### **DELTA Linear Fire & Heat Detector**

Flexible, robust, super-fast fire and heat detection



### **BUSShield**

State-of-the-art fire protection for the millions who use public transportation every day



### **KITCHENShield**

State-of-the-art fire protection for industrial kitchens



### **OIL-TANKShield**

Fire Protection for Oil Tank Storage



### **DEFENSEShield**

Total fire protection coverage for military vehicles

Our cost-effective, easy-to-maintain systems are designed as comprehensive solutions – fast detection, maximum fire suppression efficiency, complete control along with minimal environmental impact. LEHAVOT products are certified to the most stringent international commercial and military standards and an ISO 9000 compliant quality control system is in use throughout our facilities.

