

## Heavy Equipment

### SPECIAL HAZARD APPLICATION

The mining industry relies extensively on expensive special purpose vehicles and heavy processing equipment that are often operating in extremely harsh environments. Equipment fires often impact the operator, the vehicle, and the mine where the equipment is operating. Mine fires can result in property damage, production downtime, environmental hazards, and injuries or fatalities to workers.

The frequency of heavy equipment fires depends on the type of vehicle or equipment, the operating conditions, and maintenance practices. Excessive heat generated by machine components, such as the exhaust system, catalytic converter, or turbocharger, can ignite flammable fluids such as oil, coolant, hydraulic, or brake fluids. Leaks are often caused by worn seals, damaged hoses, or inadequate maintenance. Faulty wiring, connections, or electrical components within the machinery can cause short circuits, electrical arcing, and overheating. These are some of the challenges associated with heavy equipment as equipment within the mining industry often experiences sustained operation under heavy load.

Protectowire linear heat detectors are designed for the harsh operating environments associated with operating heavy equipment within the mining industry. Linear heat detection can be easily installed in hauler trucks, loaders, dozers, drills, crushers, drag lines, or hydraulic shovels. Linear heat detectors are designed to provide a fast response in this harsh environment. Often paired with a suppression system, through proximity detection the linear detectors minimize the risk of injury and equipment downtime.

