



IFES
www.fire-equipmentsystems.com



Engineered Fire Protection For :
Mining - Construction - Forestry
-Port - Marine - Buses



ENGINEERED FIRE SUPPRESSION SYSTEM

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FIRE – It can happen anytime!

An unfortunate fire incident can significantly affect mining operation in terms of costly equipment loss, opportunity cost and in some event, injury and loss of life. Mining companies around the world have Fire Suppression System installed to protect mobile equipment from fire damage and minimise disruptions to mining operation.



The IFES fire system is designed and manufactured as a fully 'ENGINEERED' fire system to the internationally recognised Australian standard AS5062. The company manufactures in Indonesia under strict quality control, certified by TUV Rheinland, ensuring the highest standard of product at the most competitive prices on the international market. IFES fire systems are engineered and manufactured for the tough rigors of harsh mining conditions as an extremely cost effective and robust fire suppression system, ensuring long life and ease of maintenance with many cost-saving advantages.

IFES FIRE SYSTEMS – A fully 'Engineered' fire system, designed and manufactured in Indonesia to strict internationally recognised Australian standard AS5062 as certified by TUV Rheinland

PRODUCTS



FEATUES OF IFES FIRE SYSTEM



INDICATING ALARM PANEL



CONTROL ALARM PANEL WITH MANUAL AUTOMATION



THESE CONFORM TO AS 5062

- The alarm has internal battery backup supply which can last from 12 - 72 hours.
- The alarm has data logging capability for fault finding or interrogation analysis.
- They are not vulnerable to voltage deviation and will operate between 9VDC and 30 VDC.
- The alarm panels can be manufactured to include special adaptations for marine, rail, aerosol firing, or for AFFF suppression systems.

ALARM PANELS –

TWO MODELS THAT OPERATE AS PLUG & PLAY OR CAN BE PROGRAMMED AND INTERROGATED FOR DATA LOGGING. THE CONTROL ALARM MODEL HAS A MISSILE SWITCH ACTUATION AT THE PANEL PROVIDING FOR MANUAL ACTUATION AND HAS 12 – 72HR BATTERY BACKUP INBUILT. OR USE THE INDICATING MODEL WITH A LOP MANUAL ACTUATOR FITTED TO OPERATOR'S CABIN SEPARATELY. BOTH ALARM PANELS ARE EQUIPPED WITH AUTO ENGINE SHUT –DOWN WITH PREDETERMINED TIME BEING SPECIFIED BY THE RISK ASSESSMENT.



LOP MANUAL ACTUATOR



ELECTRIC MANUAL ACTUATOR



LOP (LOSS OF PRESSURE) VALVE

LOP (LOSS OF PRESSURE) & ELECTRIC MANUAL ACTUATORS –

MANUFACTURED IN STAINLESS STEEL AND POWDER COATED IN SIGNAL RED. THE LOP MANUAL ACTUATOR HAS A COMPACT PRESSURE GAUGE POSITIONED INSIDE A PROTECTIVE RECESSED HOUSING ELIMINATING RISK OF DAMAGE. THE SIMPLISTIC AND TECHNICALLY ADVANCED IFES CYLINDER VALVE ALLOWS FOR THE INSTALLATION OF BOTH LOP AND LINEAR FIRE WIRE DETECTION AND ACTIVATION. THE IFES CYLINDER VALVE ENSURES LONG-LIFE AND EASE OF MAINTENANCE FOR USE IN THE MOST HARSHTEST OF MINING ENVIRONMENTS.

PRODUCTS



LOP (LOSS OF PRESSURE) VALVE



CYLINDERS -

MANUFACTURED FROM HIGH-GRADE 2.5MM, 304 GRADE STAINLESS STEEL AND FULLY AUSTRALIAN DESIGN REGISTERED TO AUSTRALIAN STANDARD AS2470. CYLINDERS ARE POWDER COATED IN SIGNAL RED AND AVAILABLE IN SIZES 20 - 120 LITRES

VIBRATION ELIMINATORS
FITTED AS STANDARD



CYLINDER BRACKETS -

MANUFACTURED IN TOUGH CARBON STEEL (AS OPPOSED TO STAINLESS STEEL BRACKETS WHICH TEAR UNDER DURESS) AND POWDER COATED IN SIGNAL RED. ALL CYLINDER BRACKETS ARE FITTED WITH VIBRATION ELIMINATORS TO WITHSTAND THE RIGORS OF HARSH MINING CONDITIONS FOR LONGER LIFE

PRODUCTS



NOZZLES -

MANUFACTURED IN SOLID BRASS WITH STAINLESS STEEL LANYARD AND BRASS DUST CAP TO PROTECT AND MAINTAIN NOZZLE INTEGRITY. NOZZLES ARE AVAILABLE IN 60-DEGREE STANDARD OR 120-DEGREE CLOSE RANGE SPRAY PATTERNS AND ARE DESIGNED TO EFFECTIVELY DELIVER A HEAVIER DROPLET OF WATER/FOAM TO THE FIRE RISK AREA. I.E. 4.1LITRES/SQ. METER/MINUTE

STAINLESS STEEL PIPING -

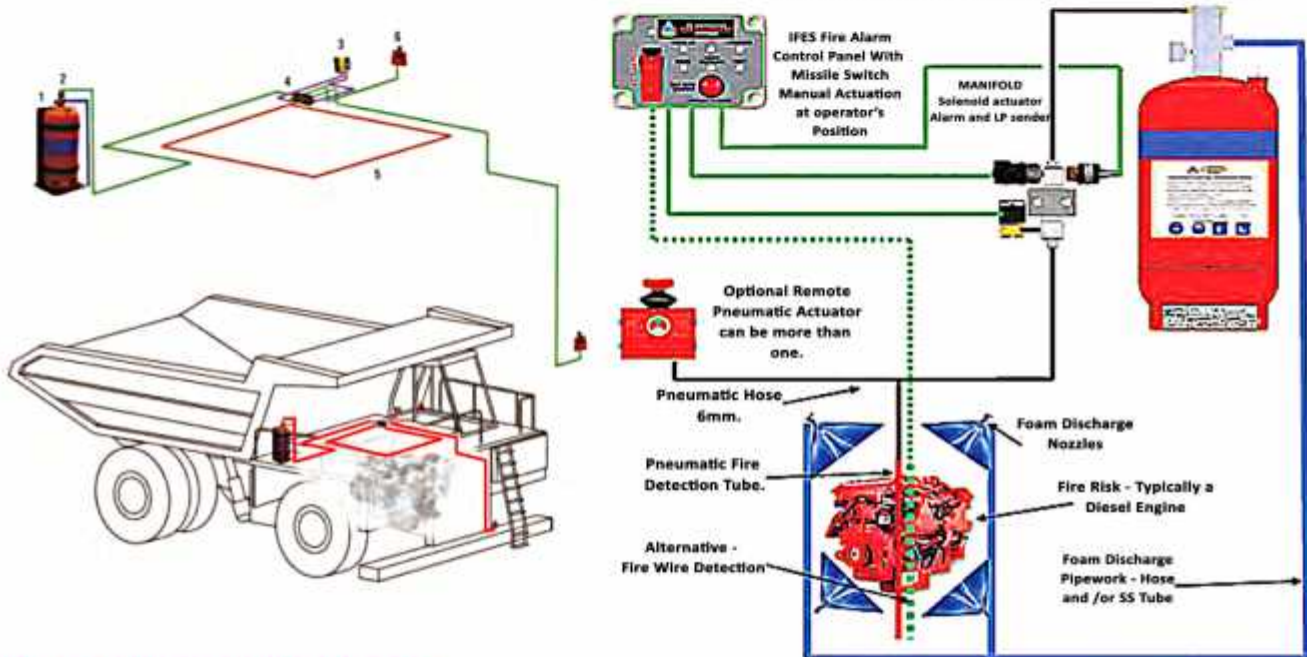
HIGH GRADE STAINLESS STEEL TUBING IS UTILISED TO DELIVER FOAM TO NOZZLES IN THE HIGH-RISK AREA. IN ALL OTHER AREAS, ALFAGOMMA, SUPERTUFF TOP-LEVEL, ABRASIVE RESISTANT HYDRAULIC HOISING IS UTILISED.



PRODUCTS



IFES FIRE SUPPRESSION SYSTEM WITH A FIRE ALARM CONTROL PANEL, PNEUMATIC OR ELECTRIC DETECTION AND PNEUMATIC REMOTE ACTUATION



LOSS OF PRESSURE (LOP) DETECTION -

UTILISES THERMOPLASTIC SENSOR TUBING, PRESSURISED BY NITROGEN AND IS A 'FULLY SUPERVISED SYSTEM', NOTIFYING THE MACHINE OPERATOR OF ANY SUDDEN LOSS OF PRESSURE IN THE SYSTEM VIA THE ALARM CONTROL PANEL MOUNTED IN THE OPERATORS CABIN. THIS IS A VERY FAST ACTING DETECTION SENSOR WHICH WILL CAUSE ACTIVATION WITHIN 4 SECONDS OF THE THERMOPLASTIC SENSOR TUBE RUPTURING UNDER HIGH TEMPERATURES.

LINEAR FIRE WIRE DETECTION -

THIS IS A 'FULLY SUPERVISED SYSTEM' WITH THE SENSOR COMPRISING OF A 3 X CORE CABLE (2X INSULATED AND 1 X UNINSULATED) WITH AN END OF LINE RESISTER, SENDING AN ELECTRICAL IMPULSE BACK TO THE ALARM PANEL, MONITORING THE SYSTEM AT ALL TIMES. THE SENSOR CABLE IS ENCASED IN DOUBLE PROTECTIVE INSULATION, ENSURING CABLE INTEGRITY WHERE INSTALLED AWAY FROM RISK AREAS, ELIMINATING POTENTIAL DAMAGE TO CABLE. ONLY THE 3 X CORE LINEAR CABLE COVERING THE RISK AREA HAS SINGLE INSULATION, SO AS TO PRODUCE A MUCH QUICKER ACTUATION TIME UNDER HIGH TEMPERATURES. IFES FIRE WIRE SYSTEMS ARE SUPPLIED WITH LOP MANUAL ACTUATORS FOR FAIL-SAFE OPERATION TO COVER SUCH INSTANCES WHERE THE ELECTRONIC ALARM CONTROL PANEL IS MADE REDUNDANT IN A FIRE EVENT IN THE OPERATOR'S CABIN.



PRODUCTS



ADDED VALUES



WEB BASED DESIGN PROGRAMME & DOCUMENTATION –

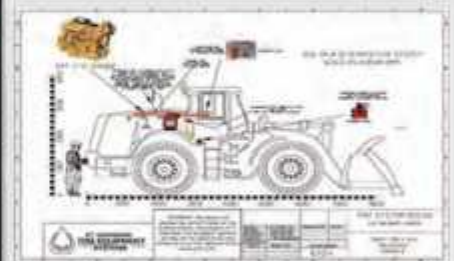
THE WEB BASED DESIGN AND RISK ASSESSMENT PACKAGE, PROVIDES FOR A FULL AND COMPLETE RISK ASSESSMENT, BASED ON THE UNIVERSALLY ACCEPTED WRAC SYSTEM, PRODUCING ALL THE NECESSARY DOCUMENTATION REQUIRED TO ASSESS RISK, SYSTEM DESIGN, COMMISSION, ALONG WITH ALL THE SCHEDULED MAINTENANCE DOCUMENTS AS DEEMED NECESSARY BY THE RISK ASSESSMENT FOR THE LIFE OF THE MACHINE. WHEN WELL MAINTAINED, THESE DOCUMENTS WILL ENSURE COMPLETE SATISFACTION OF EVEN THE MOST STRINGENT OF INSURANCE COMPANIES, PROVIDING IN MOST CASES, FOR A REDUCTION OF INSURANCE PREMIUMS FOR THE CLIENTS.

It enables designers to produce quotes that are compliant, accurate and in fast time for this impatient world.

It checks the designers assumptions and gives FAIL warning to inappropriate elections.

It produces all the paperwork required from the customer quote, to the design summary, bill of materials, test commissioning report and maintenance program.

Using risk management procedures and design processes' will satisfy the toughest fire system auditor.





ENGINEERED FIRE SUPPRESSION SYSTEM



TRAINING AND CERTIFICATION OF TECHNICIANS-

IFES OFFER FULL TRAINING AND CERTIFICATION AT THE IFES FIRE TRAINING SCHOOL IN BALIKPAPAN, WHERE TRAINEES GET TO PARTICIPATE AND EXPERIENCE A REAL-LIFE FIRE EVENT. AN INTERNATIONALLY RECOGNISED CERTIFICATE OF COMPLETION IS ISSUED UPON SUCCESSFUL COMPLETION OF A WRITTEN EXAMINATION. TRAINING IS ALSO ABLE TO BE CONDUCTED ONSITE AT CLIENT'S REQUEST.



CHEMICAL CONCENTRATED

IFES is the authorized distributor in Indonesia for the range of KV Fire Fighting foams. We stock a high grade 3% Underwriters Laboratories (UL) USA listed foam. This also includes advanced DCP powders for fire extinguishers.

PRODUCTS



tyco

Tyco Fire and Integrated Solutions has a broad range of knowledge and experience in the application of sprinkler systems throughout many market sectors in the world. Tyco installed its first commercially available sprinkler system back in 1878 and, since then, has been in the constant development of new sprinklers.

Water Sprinkler Systems

When it has to be water protected. The high performance water based fire suppression products we offer bring nvironmentally safe protection to the widest range of applications

Foam Deluge Sprinkler Systems

The Deluge system is designed to protect high hazard areas containing a severe fuel hazard with a high heat release rate by bringing a large number of open sprayers into action simultaneously in the event of a fire. The most common approach of detecting a fire is the use of a sprinkler detection line permanently charged by air. In the event of a fire, the sprinkler detector heads directly affected by the fire will operate. The immediate drop in air pressure within the detector line releases the pressure against the Deluge valve diaphragm unit causing the Deluge Valve to open and discharge water through all the open water spray nozzles to rapidly control and extinguish the fire.



PRODUCTS



FirePro®

Fire Extinguishing Aerosol Systems

FirePro Systems manufactures, markets and distributes worldwide the environment friendly FirePro Fire Extinguishing Condensed Aerosol Systems the leading brand in the condensed aerosol fire extinguishing technology.

FirePro is used to protect many applications including :

Electricity Substations, Electrical Cabinets/Panels, Transformer Rooms, Warehouses, Archives, Engine Rooms, Buses, Marine industry, Oil Platforms, Railways, Wind turbines, Server Rooms, Control Rooms and Data Centers.

Total Flooding Pre-engineered System Design

FirePro systems are designed in firm compliance with all relevant international standards such as:

ISO 15779, NFPA 2010, IMO/MSC 1270, UL 2775, CEN/TR 15276, as 4487. FirePro engineered electrical parts, electronic control units and accessories, are fully certified for their compatibility whilst circuit monitoring is provided through sequential activator modules. FirePro condensed aerosol fire extinguishing units, panels and sequential activator modules are listed separately and independently but more importantly, they are certified as an integrated system.



The **FirePro** Principle

Environment Friendly

Condensed aerosol extinguishes fire by weakening the chain chemical reaction present in the fire as a protective foam removing the heat and isolates without disrupting the system.

The environment friendly technology used is the result of many years of research and development.

Environment Considerations

- Atmospheric Ozone = Negligible
- Global Warming Potential = 0
- Global Ozone Depletion = 0
- No Copper Content
- ISO 14001 Certified
- RoHS Compliant
- HFC Free
- CFC Free






PRODUCTS



Amerex Restaurant Fire Suppression Systems offer:

- Less agent, fewer nozzles and higher nozzle height
- Around the clock protection with automatic detection
- Three detection options—fusible links, linear pneumatic and linear fusible link
- Wet Chemical agent with a low pH that's non-corrosive to stainless steel
- Pre-filled pressurized tank for reliability and ease of maintenance
- Listings with all major manufacturers of gas valves
- ANSI/UL300, ULC/ORD 125.6-1995, LPCB, CE marked, MEA and SOLAS listings

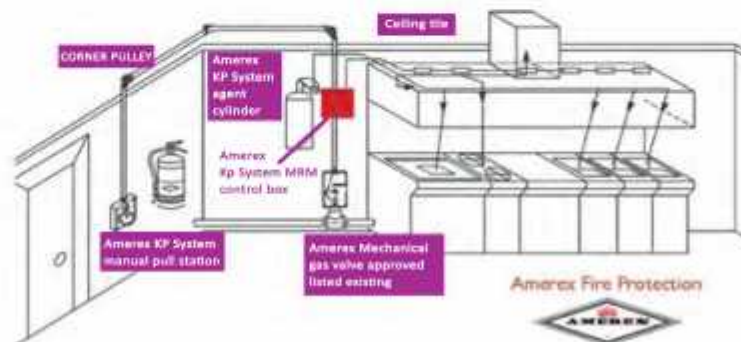


The Amerex KP system was installed by IFES and the system used a fully automatic fire detection and actuation system.



Better Fire Detection.

Entire tubing run works as a detector. In commercial kitchens, entire hood is covered with a single device. No need to change detector locations if appliances change. UL Listed for 435°F temperature response (375°F maximum intermittent safe exposure temperature with a maximum sustained ambient temperature of 176°F). Responds to actual fire as a "quick response" device. Safe for use in Hazardous locations.



GALLERY

