**Single Stable Molecule Effective on Many Class D Metals**

Argon systems are exactly that, the single molecule Ar gas. No complicated blends to deal with, as a single molecule gas Argon has been found to be effective on many Class D hazards. The single molecule structure is more stable in higher heat applications that are common in metal fires such as magnesium and lithium. At higher concentrations it may be a viable alternative to the standard Class D dry powders. With proper design, application and detection Argon systems can be effective on many of the hard to protect hazards.

**Minimal Downtime After a Fire**

You can only truly appreciate the value of this system in the aftermath of a fire. Because, the majority of the time there is no “aftermath” if you are protected with the Minimax Argon System. You simply return to your station and resume work. There is nothing to clean-up from the agent discharge and, there may not even be anything to repair or replace. When you can't afford even 60 seconds of down time, the Minimax Argon Fire Suppression System is there to keep you running. What value would you put on that kind of protection?
The Extinguishing Gases

Argon extinguishes a fire by displacing oxygen. When oxygen levels fall below the limit required for combustion, the fire is extinguished.

Argon is found naturally in the air and thus does not have an adverse effect on the atmosphere. No other extinguishing gas has such an excellent environmental track record. Argon is non-toxic and electrically non-conductive.

Fire extinguishing systems with argon as the agent are particularly suitable for a number of specific risk areas. In the event of a fire, they need to ensure the following:

Maintains Availability

One of the top priorities of these systems is to minimize downtime and maintain functionality of whatever is being protected. This would include (not limited to):

- IT installations and systems
- Control rooms for telecommunication systems
- Data archives
- Switch and control centers
- Medical facilities
- Control rooms

Functions under Extreme Conditions

Takes into account chemical and physical processes as well as environmental conditions during extinguishing. These could include (not limited to):

- Areas with flammable liquids
- Areas used for the production and processing of paints and varnishes
- Areas for warehousing hazardous goods
- Varnishing and powder coating cubicles
- Magnesium, lithium - processing

Useful in Highly Specialized Areas

Effective extinguishing of shielded objects or difficult-to-reach areas such as:

- Toolmaking machines
- Hydraulic facilities
- Silos and dust filters
- Printing machines
- Turbines
- Transformers
- Textile machines
- Engine test beds
- Engine rooms on ships.
EFFECTIVE technology for complex applications
Upon fire detection the extinguishing process is initiated.

An audible alarm is activated prior to discharge. Once the pre-alarm period has passed, the extinguishing begins. The inert gas is fed into the discharge area by a system of pipes. Finally, the gas is released through nozzles, lowering the oxygen level to a percentage that will not support combustion.

The amount of required agent is determined on a per job basis with a few key factors. These include, the volume of the enclosed area, its surface and quality (gas-tightness) and the combustible material that is being protected. The job also determines the size of the pipe system and the positioning of the spray nozzles. When protecting an enclosed area, nozzles are spread evenly over the entire area. In enclosed areas with high ceilings, the system can consist of multiple levels.

In some cases, several areas are connected to one extinguishing system. In these instances, extinguishing gas is controlled and released through selector valves.

The inert gas is stored in high-pressure cylinders which are installed and stored in compact and expandable racks. The weight of each cylinder is monitored and displayed in a central storage area, ensuring permanent control of the extinguishing volume.
Advantages

Argon Fire Suppression System - Advantages

- Suppresses fires leaving no residue.
- Suitable for enclosed and occupied areas.
- Completely inert eliminating toxic breakdown products due to agent.
- Optimum efficacy as a result of homogeneous distribution of the agent and rapid concentration build-up.
- During discharge, there is no condensation thus maintaining a safe environment with good visibility.
- Activation and extinguishing is possible without interrupting operations.
- Temperature variance is minimal, leaving no concern of thermal shock.
- Effectively extinguishes at low ambient temperatures.

- The Argon System with its modular and multi-purpose architecture can be re-engineered or extended to suit any operation.
- Recharging the system is quick and cost effective as argon is readily available.
- Approved and certified by every major authority and designed to international standards.
- Readily accepted by the Authority Having Jurisdiction (AHJ).
- Zero Ozone Depletion Potential (ODP) and Zero Global Warming Potential (GWP).
- Zero restriction by the EPA and no chance of a future ban as it is a natural part of the ambient air we breath.