

## **New steps in the world of safety for inert gas fire extinguishing systems**

Companies around the world have the need to protect their high value assets e.g. computer rooms, control rooms, etc. from fire because the corresponding downtime for repair and clean up can put them out of business. The fire protection industry is offering several choices for the fire protection of high value assets. Clean agents are one option with the advantage over a water based system that clean agents do not destroy the high value asset e.g. computers, etc. Water systems are appropriate for the protection of a building structure but when it comes to the protection of high value assets, clean agents are much more effective.

One of the clean agents a customer can choose from is an Inert Gas system. Inert Gas systems use an extinguishant extracted from the air we breath. Namely, Nitrogen, Argon and CO<sub>2</sub>. Inert Gas systems have been used for over 50 years but started to become popular after the Montreal protocol was issued in 1998, which regulates the phase out of the ozone depleter Halon. Inert gas systems are considered “environmental friendly” because they have:

- Zero Ozone Depletion Potential (ODP) and
- Zero Global Warming Potential (GWP)

### **Current Inert Gas systems have limitations!**

Current Inert Gas systems use high-pressurized containers to store the extinguishant, which is released into high-pressure piping. A pressure reducer further down the pipe network reduces the high pressure to a lower level and that’s how the extinguishant travels through the piping to the discharge nozzle. Most inert gas systems discharge from the nozzle into the protected space with a high surge flow rate, creating a potentially hazardous peak pressure in the protected space. To protect employees and facility’s infrastructure, the installation of large venting areas is required. People are concerned about the venting requirements for inert gas systems, which need to be considered when designing a new fire extinguishing system. The market wants a system that decreases the venting requirement making it a safer system, with economical hardware and reduced installation costs.

### **Fike’s ProInert™ is setting the benchmark for future Inert Gas systems!**

Fike Corporation has taken the concerns and suggested improvements from the market and incorporated them in the design of the new **ProInert™** fire extinguishing system. This resulted in the most advanced Inert Gas system technology:

### **Constant Flow Rate = Constant Savings + Constant Safety**

Most inert gas systems discharge from the containers at high pressure, then use pressure reducers further down the pipe network. This system layout requires both high-pressure and low-pressure piping to handle the high-pressure extinguishant as it travels to the discharge nozzle.

**ProInert™** is different. Its superior valve outlet automatically reduces the pressure of the extinguishant at discharge. It provides an ideal discharge pressure and maintains a constant flow rate throughout the system. That means you can forget about expensive high-pressure piping.

With **ProInert™**, you can use small-diameter, low-pressure piping from the container all the way to the nozzle, lowering system costs.

### **Lower Pressure = Lower Costs + Lower Risk**

Most inert gas systems discharge from the nozzle into the protected space with a high surge flow rate, creating a potentially hazardous pressure peak. To protect your employees and your facility's infrastructure, you have to install a large venting area.

**ProInert™** is better. It enters the protected room at a constant flow rate preventing destructive turbulence from occurring. It's not only safer for your staff and facility; it also saves you money. You can reduce your installation costs and save up to 60% on venting hardware!

### **No Excess Extinguishant = No Excess Expense + No Excess Risk**

According to industry regulations, 95% of the required inert agent must discharge within 60 seconds after activation. To achieve that discharge rate, other inert gas systems require 10% more extinguishant than you actually need to protect your space or increase the already high surge flow rate.

Not so with **ProInert™**. The unique design allows the required inert agent to discharge within 60 seconds. So you pay only for the amount of extinguishant you need.

### **Maximum Protection, Minimum Storage.**

Fike's **ProInert™** system is designed for superior long-distance delivery. The high-pressure 300 bar containers and directional valves enable you to protect several rooms with one bank of containers stored far from the protected areas. (200 bar storage containers are also available.)

Think of the cost savings! You no longer need to purchase, install and maintain several protection systems for your multi-risk facility. One **ProInert™** system does it all.

## **From Art to Industry.**

**ProInert™** is the ideal fire protection solution for a wide variety of industries and applications:

Art Galleries, Museums, Archive Storage, Computer/Operation Rooms, Control Rooms, Financial Centers and Banks Electronics and Data Processing, Insurance Industry, Military Installations Pharmaceutical/Medical, Process Industry Control Rooms, Rare Book Libraries, Record Storage Facilities, Substation Control Rooms, Switch Rooms, Telecom Centers, Universities and Colleges

## **Extinguish a Fire Naturally with ProInert™.**

Fike, analyzed a wide variety of inert gas options before selecting the blend IG-55 found in the new **ProInert™** system: 50% Argon and 50% Nitrogen. Here are the benefits of the all-natural extinguishant:

- **Zero Ozone Depletion Potential (ODP).** ProInert™ simply borrows Argon and Nitrogen from nature. When released, they automatically return to their natural place in the environment.
- **Zero Global Warming Potential (GWP).** Argon and Nitrogen have no atmospheric lifetime, so they pose no risk to the environment.
- **Similar To Air Density.** At discharge, the ProInert™ gas mixture possesses a density similar to air. You can count on:
  - Exceptional Extinguishant Retention / Hold Time in the protected space
  - Minimal Room Sealing Required
- **Easy, Economical Refill and Real-Life Testing.** Because Argon and Nitrogen occur naturally in the environment, the extinguishant is readily available and affordable. With ProInert™, real-life Discharge Testing is feasible.

- **No Secondary Combustion Products.** Argon and Nitrogen do not decompose into toxic or corrosive elements in a fire making it a safe choice for people and assets.
- **No Fogging.** ProInert™ is ideal for occupied spaces because escape routes remain visible.
- **No Residue.** That means no damage to your equipment and no clean up required.

### **ProInert™ is globally approved and recognized**

- LPCB, pending
- VDS, pending
- Included in ISO 14520, in EN 14520 & in NFPA 2001
- US EPA SNAP & HAG listed
- TPED compliant