

# Prolnert<sup>®</sup><sup>2</sup> Gaseous Suppression System













# **ProInert**<sup>2</sup> **Gaseous Suppression Systems**

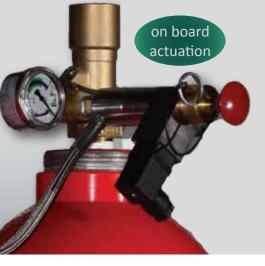


"World's first UL Listed / FM Approved, 300 Bar Inert Gas Fire Suppression System"

#### **PROINERT... THE MOST VERSATILE AND** COST-EFFECTIVE **INERT GAS SYSTEM**

Inert gas systems are the safe, natural way to extinguish a fire. Fike's PROINERT offers all the benefits of other inert gas systems, but with design improvements that make ProInert a safer and more economical solution.

And now PROINERT<sup>2</sup> offers actuation at the valve, eliminating the need for additional hardware. This not only simplifies the actuation process, it reduces costs and ongoing maintenance.



#### PROINERT<sup>2</sup> ... HOW IT WORKS

Most inert gas systems discharge from the containers at high pressure, using pressure reducers further down the pipe network and requiring the use of expensive, high-pressure piping through much of the system.

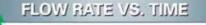
CONSTANT	=	CONSTANT SAVINGS
FLOW RATE		& CONSTANT SAFETY

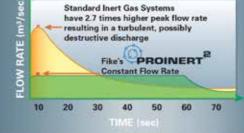
PROINERT<sup>2</sup> is different. Our superior cylinder valve automatically reduces the pressure of the extinguishant at discharge. We provide an ideal discharge pressure and maintain a constant flow rate throughout the system.

With PROINERT<sup>2</sup>, you can use small diameter, low-pressure piping from the container to the nozzle - lowering your system costs.

LOWER	=	LOWER COSTS &
PRESSURE		LOWER RISK

In addition, industry regulations state that 95% of the required inert agent must discharge within 60 seconds after activation. To achieve that discharge rate, our competitors' inert systems





must increase their already high surge flow rate, increasing the risk of damage. Consequently, a large venting area must be installed to protect the integrity of the protected space and the employees.

NO EXCESS =	NO EXCESS EXPENSE
EXTINGUISHANT	& EXCESS RISK

PROINERT<sup>2</sup> is better. Because of our unique, patented valve assembly, the PROINERT<sup>2</sup> agent enters the protected room within the required 60 seconds at a steady flow rate, preventing destructive turbulence from occurring. Therefore, only the amount of extinguishant you really need is discharged and the necessary venting area is much smaller — reducing your installation costs by as much as 60% on venting hardware!

PROINERT<sup>2</sup> ... safe, cost-effective inert gas fire suppression

### **PROTECTION WITH NO BOUNDARIES FROM** HERE TO THERE

Fike's PROINERT<sup>2</sup> system is designed for superior long-distance delivery. Our storage containers and selector valves enable vou to protect several rooms with one bank of containers stored far from the protected areas. PROINERT<sup>2</sup> containers can be placed in virtually any non-critical area. COST SAVINGS: Typically ProInert<sup>2</sup> uses fewer nozzles DATA STORAGE SWITCH ROOM Selector Valves CONTROL CENTRE COST SAVINGS: ProInert<sup>2</sup> uses low-ProInert<sup>2</sup> Storage Tanks pressure piping COST SAVINGS: Simplified actuation at the valve reduces hardware costs



#### THINK OF THE COST SAVINGS!

You no longer need to purchase, install and maintain several individual protection systems for your multi-risk facility.

#### MAXIMUM PROTECTION, MINIMUM STORAGE

PROINERT<sup>2</sup>'s containers allow you to protect single or multiple hazard areas typically requiring less floor space than other inert gas systems.

#### COST SAVINGS:

ProInert<sup>2</sup> requires 60% less venting area & hardware

CUSTOMER SERVICE CENTRE WITH SUB-FLOOR PIPPING

# One PROINERT<sup>2</sup> system does it all





#### BEYOND PROINERT<sup>2</sup>... FPT IS A LEADER IN FIRE **SUPPRESSION**

A leader in fire suppression, Fire Protection Technologies offers a full range of fire suppression products for all your industrial, commercial and special hazard applications. Our fire protection systems are effective, easy-to-use, safe for people, key assets, facilities and the environment. Whether you need innovative fire suppression, replacement of an outdated system or dedicated protection of a key asset, Fire Protection Technologies will analyse your operation and help you determine the correct fire protection for all your business applications.

In addition to the superior technology of the PROINERT<sup>2</sup> fire suppression systems, Fire Protection Technologies has developed a full line of leading edge systems for a variety of applications.

### NOVEC 1230<sup>™</sup>

Novec 1230<sup>™</sup>(C6 Fluroketone) Fire Protection Fluid is a second generation clean agent gaseous suppression system. Novec 1230<sup>™</sup> is a chemical agent used primarily in total flooding systems and is the most environmentally benign of all the chemical agents.

#### FM-200<sup>®</sup>

FM-200<sup>®</sup> (HFC-227ea) Clean Agent fire extinguishing systems are the most widely used of all the halocarbon gaseous agents, and is universally accepted as the best agent used to replace Halon 1301.

FM-200<sup>®</sup> is a chemical agent used primarily in total flooding systems and has been installed in over 200,000 systems worldwide.

#### FROM ART TO **INDUSTRY**

PROINERT<sup>2</sup> 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 Centres 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 Centres
  - Universities and Colleges

# PROINERT<sup>2</sup>

### expands your choice of inert gases

An inert gas extinguishing system is designed to reduce the oxygen concentration inside the protected hazard until it reaches a level where combustion is no longer supported. PROINERT was first introduced using IG-55, a blend of Argon & Nitrogen. PROINERT<sup>2</sup> now offers an additional 3 inert gas options for those customers who prefer alternative agents.

Inert gas options available:



THE INERT GAS SYSTEM SO SAFE **IT EVEN PROTECTS** YOUR BUDGET

Each of the gases is environmentally inert with all the benefits of an all-natural extinguishant option:

- Zero Ozone Depletion Potential (ODP): When released, they automatically return to their natural place in the environment.
- Zero Global Warming Potential (GWP): No atmospheric lifetime, so no risk to the environment.
- Suitable for Occupied Spaces
- Exceptional Extinguishant Hold Time: Minimal Room Sealing Required.
- Easy, Economical Refill: Gases occur naturally in the environment.
- No Secondary Combustion Products: Making it a safe choice for people and assets.
- No Residue: No damage to your equipment and no clean-up required.

No matter which inert gas option you choose, with a PROINERT<sup>2</sup> system, you receive all benefits from our exclusive constant flow rate valve featuring actuation at the valve.



#### CLEAN AGENT FIRE SUPPRESSION SYSTEMS WITH **IMPULSE TECHNOLOGY**

The Fire Protection Technologies Impulse Valve technology greatly improves the performance of clean agent fire suppression systems over mechanical valve systems by combining the reliability and efficiency of a rupture disc and the flexibility of electric actuation. The Impulse Valve is capable of firing up to 4 cylinders on a single circuit - making systems with this advanced actuation more costeffective to design and install.

#### To complete your PROINERT<sup>2</sup> system:

### HIGH-X VENTS

While inert gas fire suppression systems are an excellent, environmentally sound means of protecting key assets and rooms, one thing is clear, adding an additional 50% volume into a protected space (the fire suppressant agent) will cause a pressure increase. This can cause damage to the room, if not vented.

With Fire Protection Technologies' unique High-X vents, pressures are kept within acceptable levels and the gas remains in the protected space for the required time, to allow the fire to be completely extinguished. Fire Protection Technologies provides all you need – from starting calculations to installation details. Efficiency cost effectiveness and ease of use – you get it all with Fire Protection Technologies HIGH-X vents and PROINERT inert gas fire suppression.

High-X for the most economical choice in fire suppression venting.

- Fully Open at 95.5 Pascals
- Full European and US Fire Test Approval
- Fewer and smaller vents necessary
- Less construction time



## World's First UL Listed / FM Approved, 300 Bar Inert Gas Fire Suppression System

Fire Protection Technologies are the sole distributor of PROINERT<sup>2</sup> 300 bar (IG-55) system in Australia and New Zealand. Fike is the first manufacturer in the world to offer a UL/FM approved 300 bar system.

Fire Protection Technologies continues to offer the most economical 300 bar system minimising storage requirements and now with the added benefits that come with the ProInert<sup>2</sup> system. In addition to a sizable reduction in system cost, fewer cylinders translates into an inert gas solution that takes less valuable space. All of this is available with no change in the already safe, efficient ProInert constant system flow rate which allows for smaller diameter, lowerpressure, less expensive piping.

In addition to the benefits of 300 bar technology PROINERT<sup>2</sup> offers several other significant design improvements:

- Simplified, more efficient actuation with the new Universal Valve Operator (UVO).
- Ability to expand large systems easily with new pneumatic relay.
- Locate the system virtually anywhere with unlimited elevated pipe runs.
- Expanded nozzle options for greater design flexibility and area coverage.



For more information about how we can protect your business with PROINERT<sup>2</sup> or to find out more about the new PROINERT<sup>2</sup> 300 bar system, Fire Protection Technologies today: www.fire-protection.com.au, or call **1300 742 296** 

## Case Study: NextDC Data Centres

CLIENT: SITE:	NEXT DC Melbourne, Sydney, Perth, & Canberra Data Centres
PRODUCT:	
	GASEOUS SUPPRESSION SYSTEM
SCOPE:	Fire Protection Technologies protects Australia's largest Data Centre in Sydney with their ProInert <sup>2</sup> Inert Gaseou Extinguishing System.
	The Fike ProInert <sup>2</sup> system, due to its constant flow valve technology was selected to protect the Next DC Data Centre facilities around Australia. The decision to use th ProInert <sup>2</sup> technology was an easy one due to the prover performance of the constant flow valve technology whi has been on the market for 7 plus years. The benefit of the ProInert <sup>2</sup> system has meant a single low pressure m could be run throughout the building with directional v at each level. This design feature was capable due to th Fike ProInert <sup>2</sup> constant flow valve meaning that installat time and money was saved compared to running separ mains from the cylinder bank to each risk on each floor other advantage with the constant flow valve technolog was the reduced amount of pressure relief venting for e data hall. Having a constant flow valve technology insta

has meant the free vent area needed to reduce discharge pressures could be reduced by 1/3 when compared to the older orifice based inert gas technology.

So far the Sydney, Canberra, Melbourne and Perth facilities have been successfully commissioned with the Fike ProInert<sup>2</sup> system. With the S1 (Sydney) facility boasting the biggest inert gaseous extinguishing system in Australia with over 600+ (300bar) ProInert<sup>2</sup> cylinders installed.





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#### PRODUCTS:

#### Gaseous Suppression



Inert Gas (IG-01, IG-55, IG-100, IG-541)
Novec 1230<sup>™</sup> Fluid (FK-5-1-12)
FM-200<sup>®</sup> / NAF S 227 (HFC-227ea.)
Ecaro 125<sup>®</sup> / NAF S 125 (HFC-125)
Carbon Dioxide (C0₂)
Hybrid Systems (N₂ / Water)
Pressure Relief Vents
Enclosure Integrity Testing Equipment
Pipe & Fittings

#### Water Suppression

Water Mist - High Pressure Water Mist - Intermediate Pressure Water Mist - Low Pressure Hybrid Systems (Water / N<sup>2</sup>) Monitors & Delivery Systems High Speed Deluge

#### Foam Suppression



Foam Concentrates Foam Proportioning Foam Delivery Systems Foam Concentrate Testing

#### Explosion Protection



Explosion Suppression Explosion Isolation Explosion Vents & Pressure Relief Spark Suppression Explosibility Testing

#### Fire Detection



Linear Heat Detection - Digital Linear Heat Detection - Fibre Optic Linear Heat Detection - Micro Chip Flame Detection Video Imaging Detection Spark Detection Control & Indicating Equipment Thermal Imaging Detection Bushfire Detection

#### Military & Defence



Military Vehicles Naval Vessels

#### Special Applications

Micro Environment Oxygen Reduction Kitchen Protection Systems Dry Chemical Vehicle Systems Compressed Air Foam Marine & Offshore Vapour Mitigation

#### Support Services



Design / Engineering Technical Support Services & Testing

#### Australia

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'Every solution for your special hazard needs'