

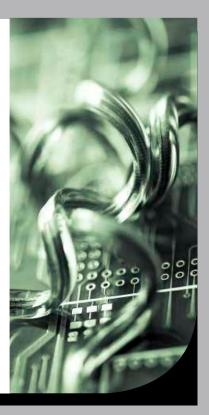
## FIXED EXTINGUISHING SYSTEM

with ARGON and NITROGEN EXTINGUISHING AGENT

BAR

# FIRE PROTECTION

# TOTAL SAFETY



Fire protection finds a great ally in IG-55. This agent combines adaptability to each project with excellent firefighting capacity, proven effective-ness and environmental friendliness.

Companies, institutions and even individuals need to effectively protect their assets and people against the destructiveness of fire. Rapid extinguishing is essential if what is protected has great value, preventing damage that could seriously affect the activity carried out, temporarily or indefinitely disrupting productivity, and even saving lives. The INERT-SIEX<sup>™</sup> 55 system has been developed to meet this demand. It uses an inert, clean, safe and environmentally friendly agent which ensures continuous and effective protection of property and occupants.

It adapts perfectly to the problems of each project while being completely environmentally friendly and pollution-free.

We are committed to ensuring this effectiveness, which is why we rely on the most complete and advanced system.

# IG-55, EFFECTIVE AT ALL LEVELS

IG-55 agent is a 50/50 blend of nitrogen and argon. It combines effective action against fire with the flexibility required for any functional need and hazard configuration, protecting staff at all times.



It is **VERSATILE**, protecting the entire enclosure of a variety of hazards, thanks to its blend of gases. Nitrogen tends to settle in the middle and top of a room, while argon settles towards the bottom. Both gases spread out to fully cover the protected area, occupying any gap.

It is **EFFECTIVE** and **SAFE**, with superb extinguishing capability. It does not interact with equipment due to its inert nature, focusing all its effects on combating the fire. It is compatible with standard construction materials and ensures successful and safe evacuation of occupants.

Since the gas is extracted from the atmosphere, it is 100% **ENVIRONMENTALLY FRIEN-DLY**: it does not deplete the ozone layer (ODP) and has zero global-warming potential (GWP). It is CLEAN: it dissipates quickly with simple ventilation and does not generate residue. It is recommended for protecting fragile and sensitive objects.



# COMPONENTS

# **CYLINDERS** at 150 and 200 BAR

Pressures at 200 bar are the most widely used globally and ensure compatibility with maintenance and refill installations and equipment in any country.

Equipment at 150 and 200 bar includes **RGS-MAM-12-2** or **2C** high-flow valves, featuring quick release for easy maintenance and refilling. They are made with forged brass and include a control gauge (0-315 bar).

| 150 AND 200 BAR |            |                      |                                    |                  |
|-----------------|------------|----------------------|------------------------------------|------------------|
| Cylinder        | Load IG-55 |                      | Valve                              | Hose             |
|                 | 150 bar    | 200 bar              |                                    |                  |
| 40 litres       | 5.94 m³    |                      | DOC MAN 10.0                       |                  |
| 67 litres       | 9.90 m³    | 13.20 m <sup>3</sup> | RGS-MAM-12-2<br>ó<br>RGS-MAM-12-2C | Model<br>FH-15CO |
| 80 litres       |            | 15.90 m³             |                                    |                  |
| 140 litres      |            | 27.80 m <sup>3</sup> |                                    |                  |



SIEX's RGS-MAM valves are very versatile and easy to handle. They allow handling when the cylinder is filled, thus ensuring faster maintenance.

CAPACITIES OF 40, 67, 80 & 140 litres They are constructed of seamless carbon steel. In banks of more than nine cylinders, a pilot bottle for activation is included.

A pilot cylinder of  $N_2$  is included for the activation of cylinder banks containing more than ten units.

## ACTUATORS:

Placed in the valve actuation ports, they start the discharge, actuating cylinders as required in each case:

- electrical
- manual
- pneumatic
- electric firing pin
- pyrotechnic/manual
- pneumatic/manual
- remote manual by pull cable (protective case available)

Handling is quick and easy. It can be installed with dry pipes, even with a loaded cylinder, without losses and with the maximum simplicity.



### SAFETY

## **PNEUMATIC RETARDERS**

Pneumatically and safely delay extinguishing agent discharge, either directly, acting through a modular or master cylinder in a cylinder bank or indirectly, through a pilot cylinder. This lag time is 30 or 60 seconds, enough for staff to evacuate safely once the alarm is triggered. This device allows overriding the delay manually, if necessary.

The operation is completely self-contained, and its failproof pneumatic operation prevents any delay that could prove dangerous, thus ensuring safety at all times.

## **PRESSURE DAMPERS**

They prevent structural damage due to excess pressure during IG-55 discharge, allowing displaced air to be released and subsequently sealing the room to ensure leak tightness.

## PNEUMATIC SIRENS

Facilitates evacuation of the enclosure in case of imminent discharge, thus improving system security.

# EXPERIENCE AND QUALITY

INERT-SIEX<sup>™</sup> 55 is certified by major international agencies, which highlights its quality.

It is developed to comply with all relevant standards: ISO 14520:15, UNE 15004-9, NFPA 2001 and CEA 4008.

It also complies with ISO 9001:2000, ISO 14001:2004 and European CE and VdS standards, as well as American FM & UL standards.

SIEX supports its customers in all phases of the project thanks to the experience accumulated throughout its history. This ensures success in all situations.





We provide comprehensive technical support in all project phases via hydraulic calculation software, tips, manuals, aftersales service and maintenance.

## OPERATION

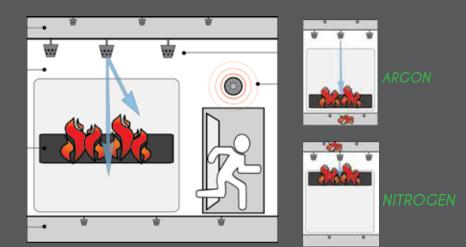
The IG-55 agent is a blend of 50% nitrogen and 50% argon, both gases obtained from the atmosphere. They are stable and do not react, thus completely avoiding the formation of dangerous compounds either by temperature, pressure, humidity or the presence of any other chemical compound.

The use of this agent covers numerous applications: solid, flammable liquid, electrical and electronic fuels. These systems can be adapted for total flooding protection of enclosures of any construction, size and configuration.

- Proven safety for people
- High extinguishing capability
- 100% environmentally friendly
- Easy to store agent away from protected hazard.
- Leaves no residue or condensation inside the protected enclosure
- Electrically non-conductive
- Suitable for use with selector valves

## THE **IG-55** EXTINGUISHING AGENT

## EXTINGUISHING



The ARGON remains in the upper part of the room, while the NITROGEN descends to the lower part The IG-55 agent has unique properties that optimize its action: stratification of agent at various levels (argon, more dense than air, in the middle and lower parts, and lighter nitrogen above) provides comprehensive protection throughout the enclosure, minimizing possible leaks.

## STRATIFICATION IMPROVES PROTECTION THROUGHOUT THE ENCLOSURE.

Applying a pressurized gas over an object influences the efficiency of extinguishing very favourably: gases are highly miscible with each other, so agent concentration will be homogeneous. Besides, the pressure pushes and displaces the ambient

> air from any corner of the room, ensuring a three-dimensional action, regardless of obstacles and shields.

# APPLICATIONS



Stations and airports



Offshore platforms



Laboratories



Pharmaceutical Industry



Telecommunication systems



Hospitals



Electrical cabinets and substations



Museums and art galleries



Computer Rooms



Wind turbines



Archives and libraries



Offices



Gas facilities



Petrochemical facilities



Educational establishments



Residential buildings

# BENEFITS OF USING INERT-SIEX<sup>TM</sup> 55

PROTECTION OF THE ENCLOSURE FROM FLOOR TO CEILING, THANKS TO STRATIFICATION. ITS OMNIDIRECTIONAL ACTION REACHES INACCESSIBLE SPACES, MOVING BETWEEN OBSTACLES.

## AT THE SAME TIME IT BENEFITS:

## THE INSTALLER:

- Quick and easy installation.
- Allows for long and complex pipe runs.
- Safe valves which can be manipulated with loaded cylinders.
- Fast and simple maintenance.

## THE CUSTOMER:

- Immediate resumption of activity, no cleaning work and no damage to documents or assets.
- Clean and non-toxic, does not damage the equipment.
- Minimal use of storage space.
- Low protection system cost.

## THE USER:

- Total, safe protection in case of fire.
- Safe evacuation, maintaining an appropriate level of oxygen.
- Existence of safety-enhancing components: retarder, siren, etc.

## THE PLANET:

- No impact on ozone (ODP)
- No global warming potential (GWP)
- Does not pollute or produce residues.

#### SIEX

C. MERINDAD DE MONTIJA Nº 6 P.I. Villalonquéjar 09001 Burgos (SPAIN)

TLFND: +34 947 28 11 08 WEB: WWW.SIEX2001.COM

SIEX® is a registered trademark.

The information provided in this document is for information purposes only. Technical information must be used for the installation of all SIEX systems. SIEX assumes no liability for any use that third parties may make of this information.

SIEX reserves the right to make any change in both the capabilities and features of its equipment.

#### FIRST OPTION FIRE SYSTEMS & BUILDERS INC.

UNIT 28, 851 L2 BRISTOL STREET, NORTH FAIRVIEW QUEZON CITY (02) 7618-4497/ (02) 7088-7340/ (63) 917-167-EMAIL: INFO@FIRSTOPTIONPH.COM WEB: WWW.FIRSTOPTIONPH.COM