INERT

SIEX CFT 01

FIXED EXTINGUISHING SYSTEM

with IG-01

extinguishing agent

CONSTANT FLOW TECHNOLOGY

FIRE PROTECTION

SAFE AND ENVIRONMENTALLY FRIENDLY

Thanks to our company's strong focus on innovation and development, we have developed the INERT-SIEX™ CFT-01 (Constant Flow Technology) system, one of the greatest advances in the firefighting industry, using IG-01 as extinguishing agent. It combines a commitment to safety and the environment—the agent consists or argon,—with enhanced firefighting benefits by using the RGS-MAM-RD constant pressure valve. These innovations cut back on fire-related damage, injury, loss of data and downtime, temporarily or even permanently.

The IG-01 agent is perfectly suitable for especially sensitive and valuable hazards, thanks to its functional, environmental and safety features. It is highly effective and respectful of occupants, the environment and the property protected.

The use of this agent in combination with INERT-SIEX™ CFT (Constant Flow Technology) technology significantly decreases the diameter and thickness of the piping system, resulting in a significant cost reduction and streamlining the system installation, thus obtaining numerous benefits.

The RGS-MAM-RD cylinder valve delivers constant discharge pressure and thus avoids the initial overpressure typical in conventional systems. This in turns helps ensure the integrity and safety of the enclosure.

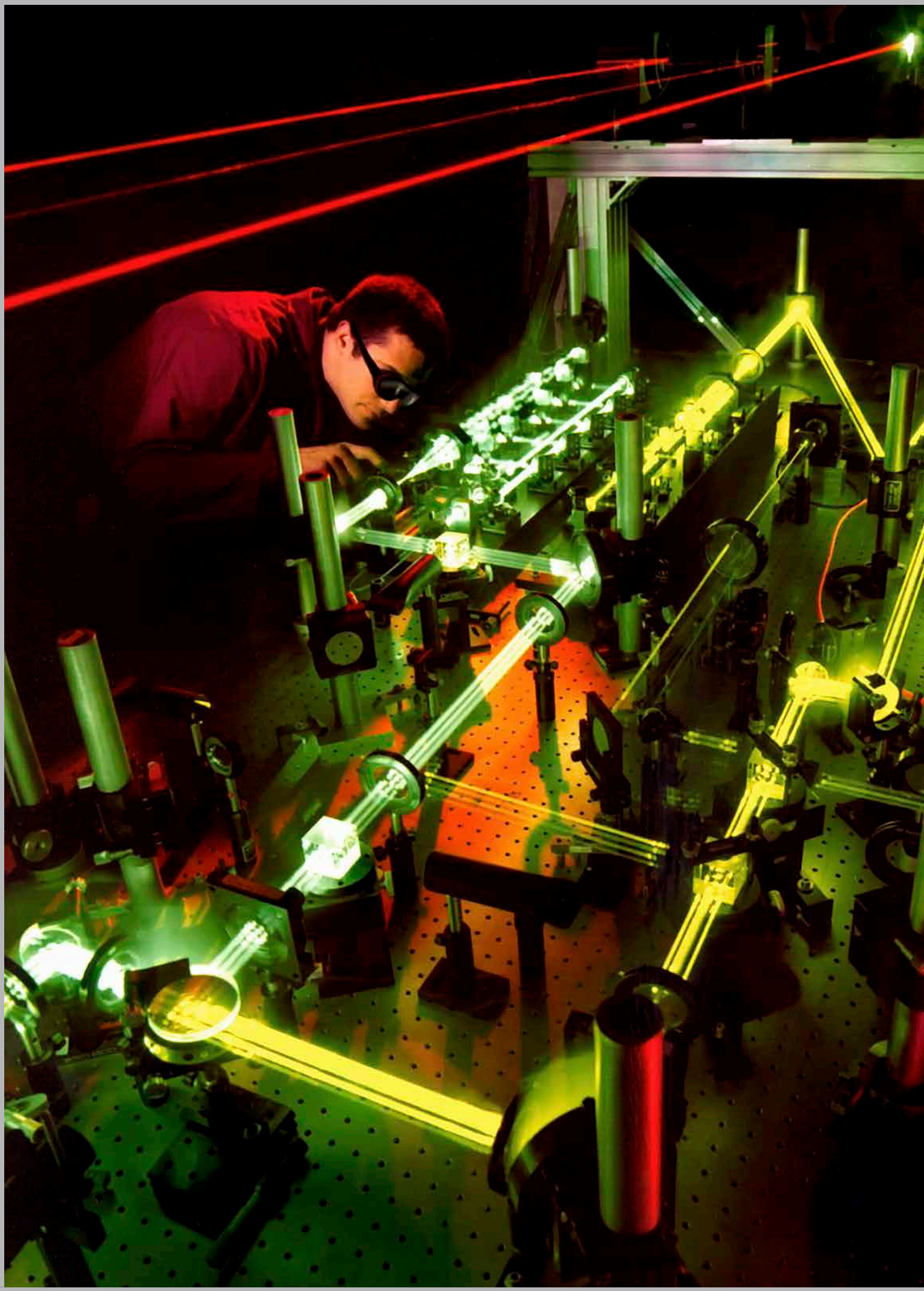
INERT-SIEX™ CFT-01:
ADVANCED TECHNOLOGY AT THE SERVICE OF THE ENVIRONMENT

One of the most popular extinguishing agents internationally, the IG-01 provides remarkable efficiency, flexibility and many other advantages, in terms of both the design and the refilling and maintenance of the equipment, regardless of where they are installed.

Argon, IG-01's sole component, is a harmless gas to people and therefore fully suitable for use in occupied areas. Furthermore, since the gas is non-toxic and does not reduce visibility—discharged at a constant pressure—it tremendously improves evacuation, increasing safety without harming the environment.

The controlled release of a completely environmentally friendly agent, IG-01, via SIEX's CFT technology, couples safety and environmental protection to guarantee total fire protection under any circumstances.

INERT SIEX CFT 01



UNIQUE FEATURES OF INERT-SIEX™ CFT-01 COMPONENTS.

Maximum efficiency and reliability through an innovative design.

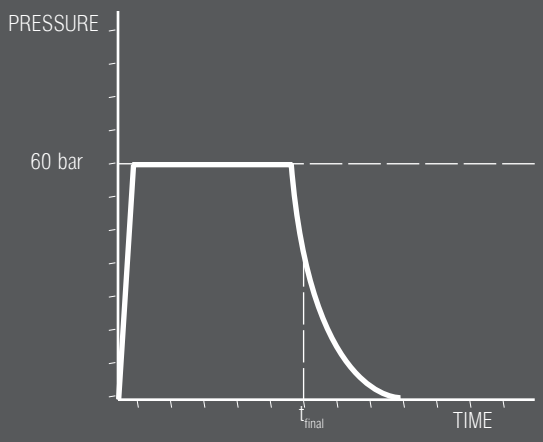
Although conventional systems using IG-01 continue to be fully adequate and valid, the advanced INERT-SIEX™ CFT-01 (Constant Flow Technology) system delivers clear benefits both in the system and the protected enclosure.

The discharge of IG-01 is regulated by the RGS-MAM-RD valve, adaptable to any storage and control pressure. Thanks to its innovative design, the discharge pressure can be modified depending on installation requirements (typically 60 bar). Discharge occurs at a constant pressure. The INERT-SIEX™ CFT (Constant Flow Technology) system features an exclusive pneumatic mechanism, which controls and adjusts the discharge pressure.

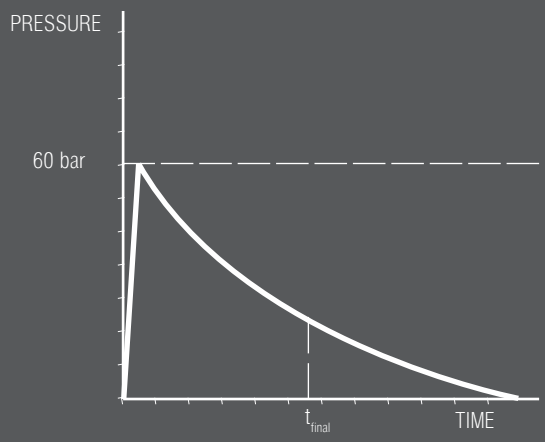
The IG-01 gas output control varies as the pressure in the cylinder decreases, achieving a constant discharge.

Unlike similar systems that operate based on mechanical elements, the INERT-SIEX™ CFT-01 (Constant Flow Technology) system uses a safer and more reliable pneumatic mechanism (crucial factor in firefighting), eliminating possible faults due to mechanical property loss (mechanical fatigue of components, locking, jamming, etc.).

Maintenance is easier with the built-in gauge, pressure switch, gauge with electric contact, mechanical weighing, etc. This ensures system availability when needed, regardless of the conditions.



CONSTANT FLOW TECHNOLOGY VALVE



TRADITIONAL SYSTEM VALVE

INERT-SIEX™ CFT-01, THE MOST FLEXIBLE STORAGE OPTION

This system features the full range of pressures accepted by current regulations for various enclosures. It can thus ensure the design concentration required for each hazard using only the necessary amount of agent and assure its proper distribution.

The storage capacity of the INERT-SIEX™ CFT (Constant Flow Technology) system's IG-01 agent is one of the unique features that make it ideal for protecting against any hazard.

INERT-SIEX™ CFT-01 (Constant Flow Technology) offers modular 26.8, 40, 67, 80 and 140 litre units operating at a maximum pressure of 150 bar for the protection of small hazards. It also has modular systems and cylinder banks that can store IG-01 agent at 200 and 300 bar pressure, allowing the storage of large amounts of extinguishing gas to protect large enclosures far removed from the cylinder storage area.

INERT-SIEX™ CFT-01

200BAR

Cylinders of 26.8, 40, 67, 80 and 140 litres.
Filled respectively with 5.59 m^3, 8.34 m^3, 14.00 m^3, 16.70 m^3 and 29.20 m^3 of IG-01.

INERT-SIEX™ CFT-01

300BAR

Cylinders of 26.8, 40, 80 and 140 litres.
Filled respectively with 7.98 m^3, 11.91 m^3, 23.80 m^3 and 41.70 m^3 of agent.

STABLE AND ENVIRONMENTALLY FRIENDLY AGENT: IG-01

Argon is the agent used in the INERT-SIEX™ CFT-01 (Constant Flow Technology) system. In addition to being highly effective in fighting fires in any hazard, it delivers unbeatable discharge features thanks to the system's innovative RGS-MAM-RD cylinder valve.

This extinguishing agent is harmless to humans and therefore SUITABLE for occupied areas at design concentrations according to the main standards. Since it is non-toxic and does not reduce visibility, the enclosure can be evacuated quickly and safely in case of release. The integrity of the enclosure is also secured since the controlled discharge prevents pressure peaks, minimizing overpressure relief needs.

This agent offers significant ECOLOGICAL added value. It does not deplete the ozone layer (ODP) and has zero global-warming potential (GWP).

This clean agent does not damage electronic equipment and is chemically stable. When discharged, argon does not generate particles or other debris that may be deposited and harm protected goods. Discharge at constant pressure minimizes potential damage to sensitive equipment, especially electronic devices.

Since it is an inert extinguishing gas, IG-01 is GLOBALLY AVAILABLE, under no market or patent restrictions. Since argon is extracted from atmospheric air, it is accessible anywhere in the world.

Argon is a noble, stable gas that does not react with anything, even at high temperatures (such as those occurring in a fire). INERT-SIEX™ CFT-01 (Constant Flow Technology) therefore does not react dangerously to changes (temperature, pressure, humidity, light or other compounds present during a fire) and is totally suitable for solid fuel, flammable liquid, electrical or electronic fires.

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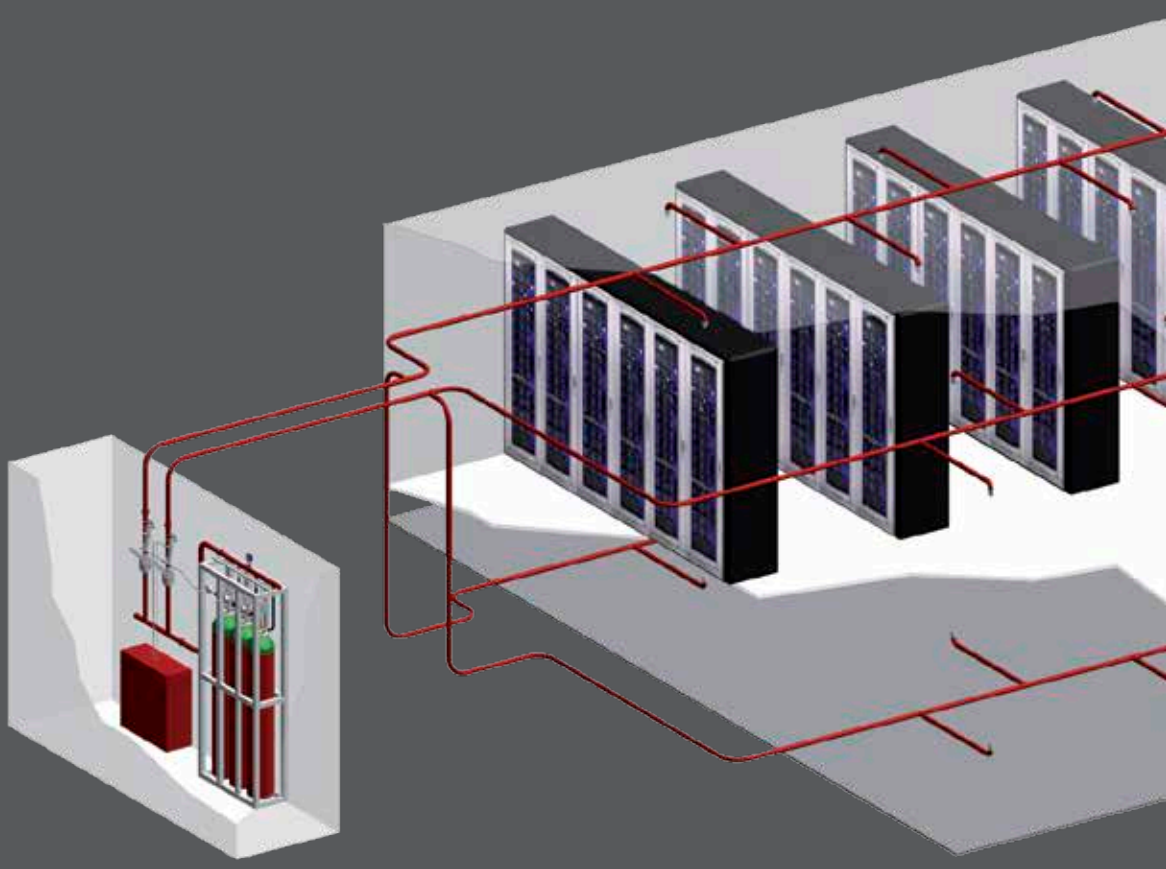
BENEFITS:

- SUITABLE FOR OCCUPIED AREAS.
- HARMLESS TO THE OZONE LAYER (ODP ZERO).
- ZERO GLOBAL WARMING POTENTIAL (GWP).
- ELECTRICALLY NON-CONDUCTIVE.
- CLEAN, WITH NO RESIDUE.
- INERT, DOES NOT DAMAGE ELECTRICAL OR ELECTRONIC EQUIPMENT.
- HIGH EXTINGUISHING CAPABILITY.
- IMMEDIATE RETURN TO BUSINESS.
- LOW COST OF INSTALLATION, RECHARGING AND MAINTENANCE.
- COMPATIBLE WITH ANY TYPE OF DETECTION.
- REAL TESTS CAN BE PERFORMED.
- FLEXIBLE DESIGN, ADAPTABLE TO ANY HAZARD.
- EXTENSIVE EXPERIENCE IN THE USE OF THESE AGENTS.

FIREFIGHTING

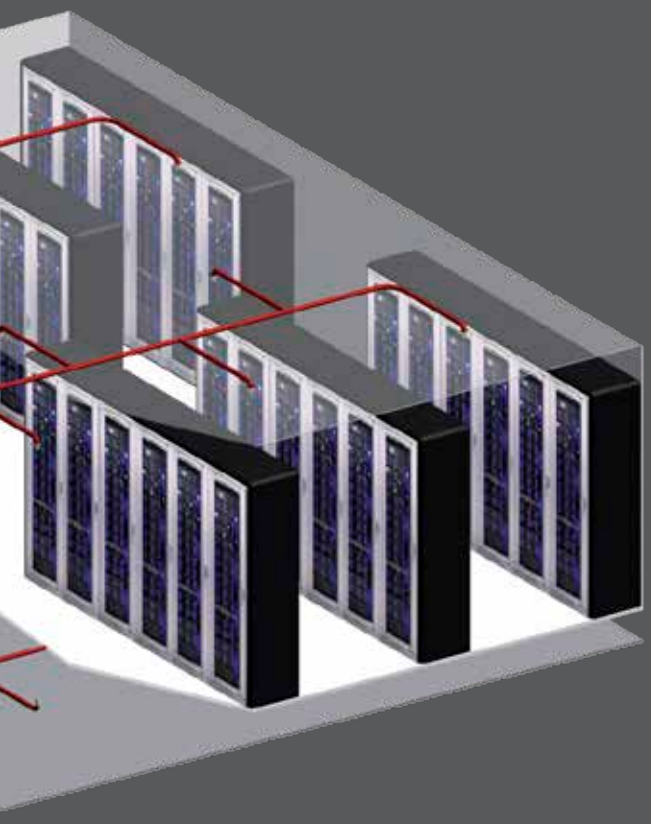
Upon detection of a fire, the system sends an activation signal. Alternatively, this action can be manually performed by staff present. In both cases the same discharge protocol is followed.

The gas, which is stored at a pressure of 300 bar to minimize system space requirements, is discharged through the constant flow cylinder valve(s) (modular or cylinder bank systems). Pressure is reduced to below a threshold value (typically 60 bar) determined by the designer, thanks to the new technology in the RGS-MAM-RD cylinder. Downstream of this, the lower pressure allows the use of conventional piping and fittings, resulting, in turn, in storage that can be located away from the protected hazard, handling any distance and architectural obstacle.



APPLICATIONS

- *MUSEUMS AND ART GALLERIES*
- *TELECOMMUNICATION SYSTEMS*
- *COMPUTER ROOMS*
- *HOSPITALS*
- *PETROCHEMICAL FACILITIES*
- *LABORATORIES AND CLEAN ROOMS*
- *ELECTRICAL CABINETS AND SUBSTATIONS*
- *ARCHIVES AND LIBRARIES*
- *DPCS*
- *OFFSHORE AND GAS FACILITIES*
- *EDUCATIONAL ESTABLISHMENTS*
- *PHARMACEUTICAL FACILITIES*
- *OFFICES*
- *RESIDENTIAL BUILDINGS*
- *STATIONS AND AIRPORTS*
- *VEHICLES*
- *ANECHOIC CHAMBERS*
- *OTHERS*



IT MEETS THE MOST DEMANDING REQUIREMENTS

TOTAL RELIABILITY

Unlike other similar systems that use mechanical devices (which can pose problems that are impossible to detect and prevent their proper operation), the INERT-SIEX™ CFT-01 (Constant Flow Technology) system uses pneumatic technology to control the discharge of the IG-01 extinguishing agent, which makes it possible to easily verify that the equipment is in proper condition at all times, by monitoring the control pressure.

SUITABLE FOR OCCUPIED AREAS

Extinguishing using argon is completely safe in enclosures where there are usually personnel present since it is non-toxic and ensures good levels of visibility. The constant discharge of agent also boosts the structural protection of the enclosure and improves evacuation.

Oxygen concentration levels are maintained at appropriate and safe levels for occupied spaces.

EASY TO REFILL

Argon is extracted directly from the atmosphere. It is an unblended gas free from trademark restrictions, so it is inexpensively and readily available worldwide.

Refills are simple and fast thanks to SIEX's proprietary valves and the nature of the agent, which allows a higher fill per cylinder than other gases.

IMMEDIATE RETURN TO BUSINESS

After discharge, the agent is removed simply by ventilating the room. The agent prevents reignition and leaves no residue of any kind, so it does not need cleaning.

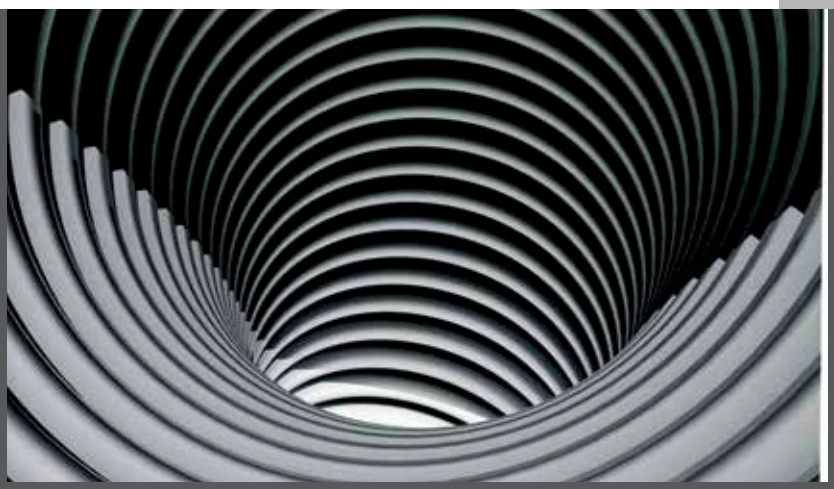
By acting quickly and very effectively, potential damage is very limited.

OPTIMIZATION OF INSTALLATION COSTS

The RGS-MAM-RD cylinder valve in the INERT-SIEX™ CFT-01 (Constant Flow Technology) system scales down the size of the pipe by at least one diameter size, which minimizes the installation cost.

SUITABLE FOR USE WITH SELECTOR VALVES

Thanks to these valves, a single system can be used to protect various isolated hazards. They help minimize installation costs while continuing to guarantee full protection.



LONG PIPE RUNS

This is the ideal system when the cylinders are located away from the protected hazard, when the pipework is complicated or there are many fittings, because storage pressure can go up to 300 bar and the discharge pressure can be selected by the designer.

NO DAMAGE TO EQUIPMENT

The agent acts on the entire enclosure, and in gaseous form protects hard-to-reach areas, easily reaching into the equipment without leaving any residue. Its inert nature does not cause any reaction, protecting sensitive, electrical and electronic equipment. It also does not cause corrosion. The controlled discharge also enhances safety, especially in elements more sensitive to high sound levels.

COMPLETELY ENVIRONMENTALLY FRIENDLY

Argon is obtained directly from the atmosphere and does not affect the ozone layer or contribute to global warming (zero ODP and GWP). This, coupled with its low cost, enables full-scale tests without harming the environment.

LESS NOISE DURING DISCHARGE

It can protect highly sensitive equipment, especially devices that are very sensitive to changes in pressure, as in the case of hard drives.

By acting quickly and very effectively, potential damage is very limited.

CERTIFIED BY
THE LEADING
CERTIFICATION BODIES

VdS UL FM APPROVED

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