



FIXED EXTINGUISHING SYSTEM

with **SIEX-NC™ 1230**
extinguishing agent



PROTECTION THAT MAKES THE DIFFERENCE



The fire protection sector is dynamic and technological with high added value due to the security it offers. Making people safer and facilitating continuous operations for industries, businesses and services. With a growing need to improve the performance of traditional systems, the latest generation of gas extinguishers brings innovation, risk reduction and environmental improvements. The agent SIEX-NC[™] 1230 is a clean gas, especially indicated to protect sensitive and valuable goods.

It acts quickly on the premises -during

the fire's initial phase-, to suppress it without damaging the equipment. Its early detection capability reduces any damage due to fire, smoke or particles, as well as collateral damage caused by other agents (such as water, chemical dust or aerosol).

SIEX-NC[™] 1230 is doubly clean: it generates no waste and is environmentally friendly, being the least polluting chemical gas on the market: zero deterioration of the ozone layer and minimal greenhouse effect.

Safety and Efficiency for People, Goods and the Environment

Electrical, electronic, computerised and industrial equipment, among others, are vulnerable to fire and its consequences (smoke, particles, water damage from sprinklers or firemen). As are valuable objects when in storage, therefore it is essential to install a suitable system that avoids damaging the goods.

The SIEX-NC™ 1230 systems are safe, clean, flexible and adaptable to every need

The presence of electrical equipment in the workplace is increasingly frequent and must be kept operational without fail.

In the event of damage, not only can this incur repair or replacement costs of any affected equipment, it can also lead to a costly interruption of the services provided. These down periods can interrupt the company's daily activities.

INNOVATION + VERIFICATION

= GUARANTEED EFFECTIVENESS

Specific certification are required against fire:
UL, FM, VdS, LPCB



* In process



The SIEX-NC™ 1230 family



25 , 42 bar
For daily protection



32, 34, 50, 55, 60 bar
For the most particular and demanding conditions



SIEX *trace*



SIEX *Dual*
DETECTION & EXTINCTION



SIEX *Silp*



SIEX *SPK*

For the protection of small spaces. With built-in detection



SIEX *Dual Marina*

For the most complete detection and extinguishing in offshore environments



The SIEX-NC™ 1230 Agent

- Clean
- Without residue
- Colourless
- Odourless
- No Electric Conductor

SYSTEM THAT FULFILS MAXIMUM EXPECTATIONS

The SIEX-NC™ 1230 extinguishing gas is a CLEAN agent: it does not leave residues after discharge and produces minimal pressure in the facility.

It extinguishes the fire by primarily absorbing the heat from the flames and is an alternative accepted by the main environmental regulations: USA-EPA¹ and UE-EEA².

It is a compound that looks similar to water. It is colourless, odourless and non-conductive of electricity, as well as suitable for solid fuel fires, flammable liquids or energised electric fires

It acts by completely flooding the enclosure, therefore it is necessary to be completely focused and aware during the necessary period. It does not significantly reduce the oxygen in the room, nor does it generate noisy or low visibility discharges, which allows safe evacuation.

¹United States Environmental Protection Agency (SNAP – Significant New Alternatives Policy)

²European Environment Agency (F-gas regulation)

It is designed to protect sensitive risks, such as data processing or electronic communications centres, banks, museums, libraries, clean rooms and electrical equipment, where water would cause severe damage in any circumstance.

ECOLOGICAL

No depletion of the ozone layer (ODP), low greenhouse effect (GWP) and short atmospheric half-life. It is the most ecological chemical extinguishing agent available.

It is an extinguishing agent with outstanding fire performance.

SAFE

It has a low design concentration compared to the levels of adverse effects observed (NOAEL).

EN-15004	CLASE A	NOAEL	LOAEL	LC50
HFC-23	16.3 %	30.0 %	30.0 %	>65.0 %
HFC-125	11.2 %	7.5 %	10.0 %	>70.0 %
HFC-227ea	7.9 %	9.0 %	10.5 %	>80.0 %
FK-5-1-12	5.3 %	10.0 %	10.0 %	>10.0 %

NFPA 2001	CLASE A	NOAEL	LOAEL	LC50
HFC-23	18.0 %	30.0 %	30.0 %	>65.0 %
HFC-125	8.7 %	7.5 %	10.0 %	>70.0 %
HFC-227ea	6.7 %	9.0 %	10.5 %	>80.0 %
FK-5-1-12	4.5 %	10.0 %	10.0 %	>10.0 %

SIEX-NC™ 1230 Systems

The SIEX-NC™ 1230 systems are pressurised with dry nitrogen up to 25 or 42 bar.

SIEX-NC™ 1230 a 25 bar

Suitable for low pressure welded cylinders, as well as conventional pipes and fittings.

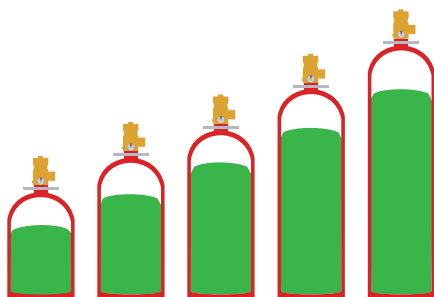
It is a competitive system and has many applications.

SIEX-NC™ 1230 a 42 bar

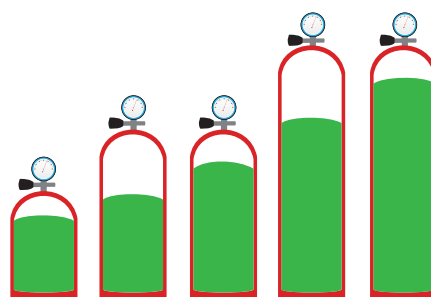
It requires non-welded cylinders and can cover greater distances of pipe, with stronger discharge.

Very useful for more complex networks or protections in medium and large facilities.

In addition, we have the widest range of cylinder capacities in the market, adapting the supply to exactly what you need.



**PRECISELY TAILORED TO
ANY SCENARIO**

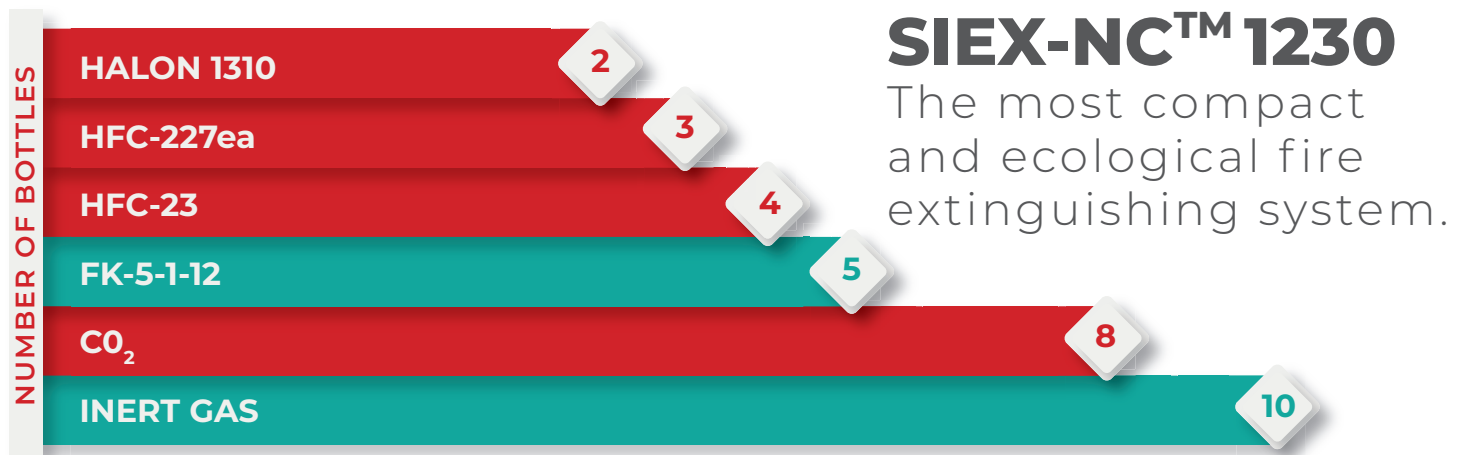


OTHERS

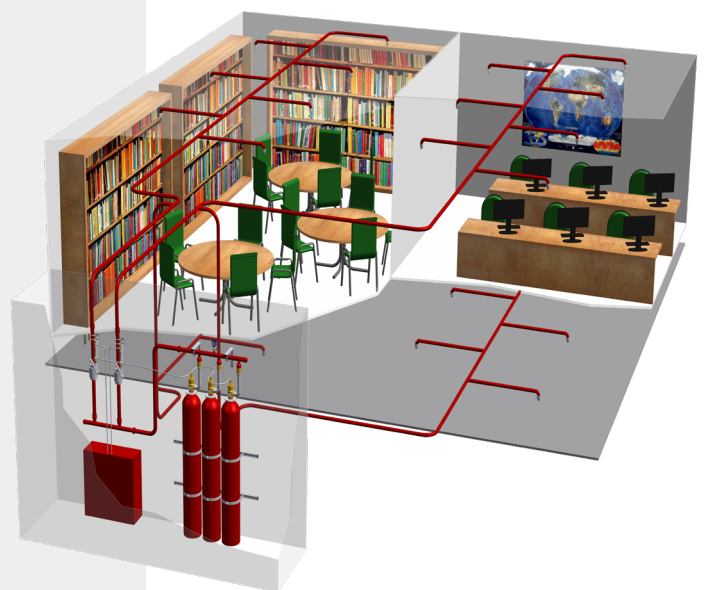
**LESS SIZES LESS
FLEXIBILITY**



Our systems are compact and optimised, minimising the facility's footprint thanks to the size adjustment and its liquefied gas load which is pressurised with dry nitrogen according to the design needs.



- **SIEX complies with ISO 14520, EN 15004 or NFPA 2001 and local regulations.**
- **We include justifying hydraulic calculations, with approved download software.**
- **We guarantee a precise filling, without humidity or impurities, as part of our certification.**



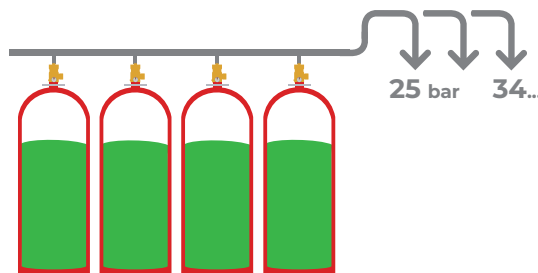
S-FLOW

GREATER DISCHARGE

The systems SIEX-NC™ 1230 S-FLOW a 464, 493, 725 & 798 PSI (32, 34, 50, 55 & 60 bar) have optimised discharge performance, allowing maximum adaptation and optimisation for each design:

SIEX-NC™ 1230 S-FLOW a 32 / 34 bar:

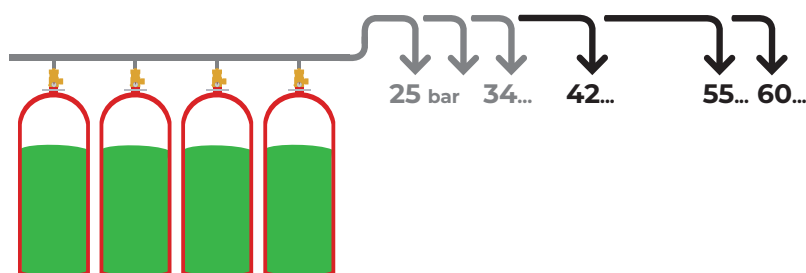
The low pressure of up to 34 bar allows further distance and discharge flow without increasing the overall costs of the installation. Improved performance without compromising the budget.



SIEX-NC™ 1230 S-FLOW a 50, 55 / 60 bar:

It takes the high pressure to the maximum capacity: it covers great distances of pipe, with complex networks and great volume (more than 1T in 10s).

It is the ideal option to reduce installation diameters (increases the flow), to protect large enclosures (high discharge capacity) or for centralised systems (use of directional valves with selective activation according to the size of the enclosure).



Other components

Our systems are compact and optimised, minimising the facility's footprint thanks to the size adjustment and its liquefied gas load which is pressurised with dry nitrogen according to the design needs.

Siex tests and approves all the necessary or optional devices to configure customised systems:

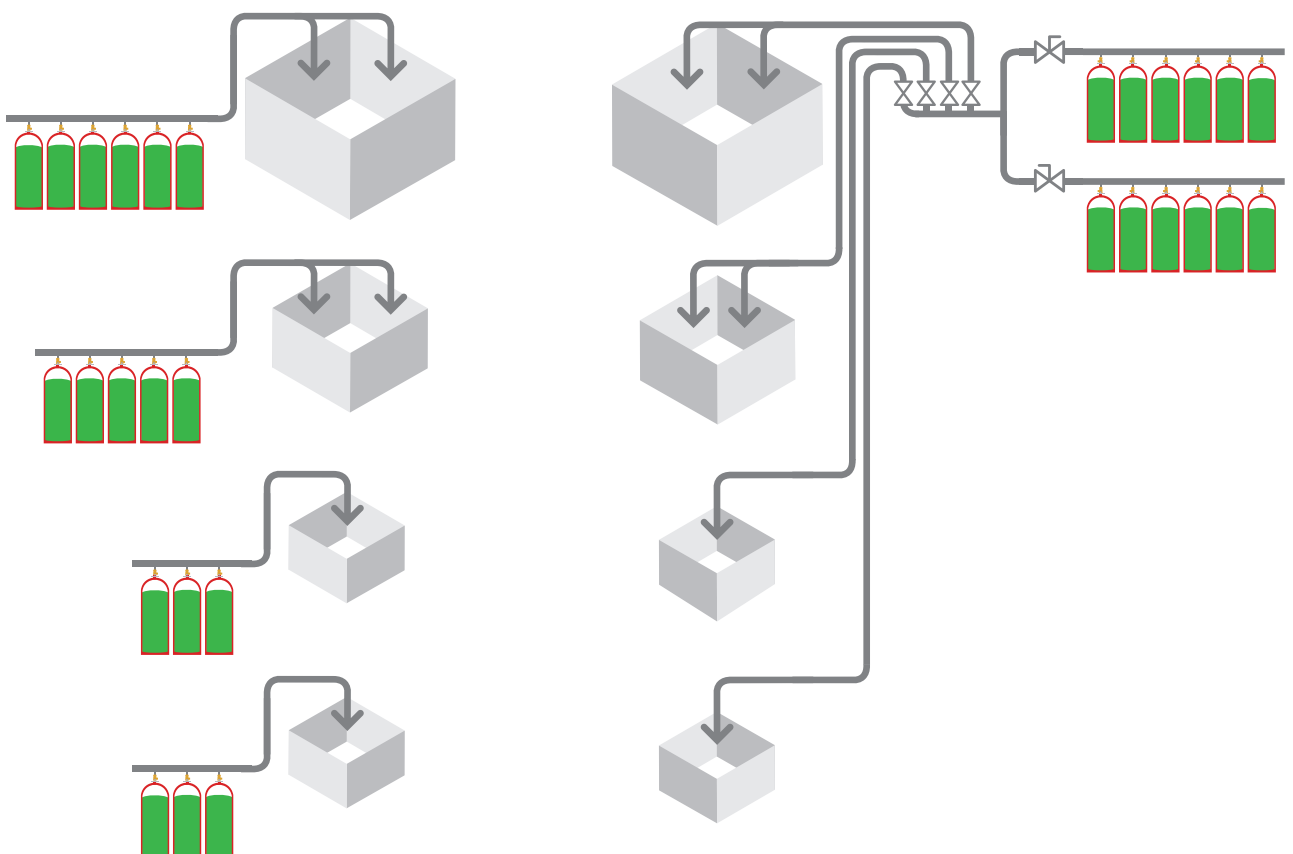
ACTUATORS: electric, manual, remote manual, pneumatic, remote pneumatic, thermal, etc.

SECURITY AND CONTROL: load control (pressure switches, pressure gauges, mechanical weighing), pneumatic retarder, odour reducer, shut-off or purge valves, etc..

HAZARDOUS AREAS: electrical components for explosive atmospheres.

DIRECTIONAL VALVES: for the centralisation and distribution of the agent to different enclosures. Available up to 4" pneumatic opening.

Optimise the design with total security. With the possibility of including passive or connected reservation.




The most demanding needs require the most innovative solutions:

SIEX DETECTION + EXTINGUISHING Autonomous


The autonomous detection and extinguishing systems by SIEX are the ideal option for protecting all small and medium facilities. They offer a proven reliability in homologated tests with real fire. With both linear and point sensors, the effectiveness of the SIEX-NC™ 1230 agent allows detection + extinguishing in just 60 seconds, with minimal equipment installation.


SIEX-NC™ 1230 + PUNCTUAL DETECTION:

 It consists of two detection systems:


Simplex Systems: incorporates a mechanical power plant based on the thermal detection of a line of calibrated bulbs. Simple, efficient and functional without an external energy supply

Complex System: enables cross-detection, with two lines of hotmelt bulbs that prevent accidental discharges from the mechanical power plant. Reliable, safe and automated. They have the most internationally recognised certifications, including land and FM-Marina, for use on ships, yachts or offshore platforms.

 The punctual copper pneumatic detection line is flexible, easy to install and very resistant to physical or mechanical movement. It operated without an external energy supply.

 Placed in the upper part of the enclosure, the small container discharges immediately after breaking the thermal bulb by accumulation of heat. Ideal for small spaces with fast-moving fires..

SIEX-NC™ 1230

 The well-known hotmelt sensor tubing used as the main detection allows the system to detect and extinguish the incipient focus of the fire in just one minute, without reactivation. It can simply run through the upper part of the network thanks to its superior features and design.



ADVANTAGE



**MINIMUM
INSTALLATION**



**INSURANCE FOR THE
TEAMS**



**COMPACT AND
VERSATILE**



**CLEAN AND SAFE,
WITHOUT WASTE OR
CLEAN UP**



**ENVIRONMENTALLY
FRIENDLY**



**IMMEDIATE
RESUMPTION, AFTER
VENTILATION**



**AUTOMATIC ACTIVATION WITHOUT
EXTERNAL ENERGY SUPPLY**

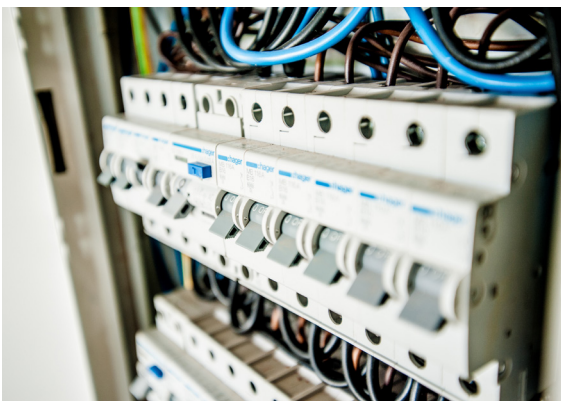
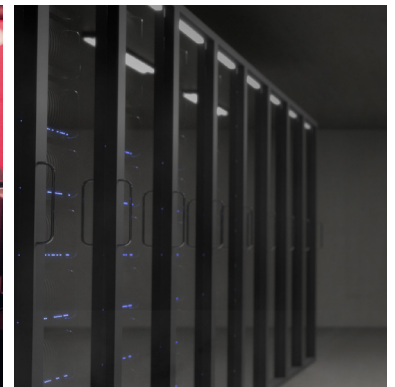
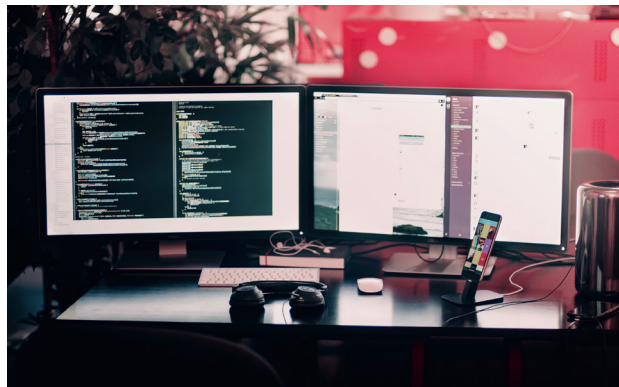


TRACKABLE

Because fire resistant equipment is constantly developing, we verify every step with the industry experts and demand independent approvals from UL, FM, VdS, LPCB.



* In process





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extinguishing agent

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