

ARGONITE® C60 Inert Gas Fire Suppression System with Controlled Flow Technology



ARGONITE® C60 is the advanced new combination of the ARGONITE® inert gas fire suppression system with innovative patented C60 Controlled Flow Technology. It offers a sound investment to safeguard your company's assets, both today and well into the future.

The ARGONITE® C60 System makes real savings possible in overall system costs, while continuing to meet the stringent demands of environmental and fire safety regulations. It is an evolutionary advance in the ARGONITE® inert gas fire suppression system range. Our tests show that ARGONITE® C60 Controlled Flow technology typically offers:

- 60% reduction in peak mass flow.
- 60% reduction in enclosure pressure relief venting panel and area of aperture in the enclosed wall and therefore real savings on vent installation costs.
- Vent size can be accurately determined at the quotation stage of a project instead of relying on hydraulic flow calculations.
- 60% reduction in noise (vibration during discharge) for reduced effect on sensitive electromechanical equipment.
- 60 bar outlet pressure allows the maximum possible flow and therefore the use of smaller-diameter pipes in the distribution network.
- Elimination of high-pressure manifolds and restrictors for single zone systems without reduction in discharge nozzle pressure (60 bar).
- If more than one area in a building needs to be protected, there is no need to install several systems. A single bank of cylinders can be stored remotely from the risks with directional valves to divert the gas to where it is needed.
- Up to 60 cylinders may be actuated from a single high-performance release unit.
- Easy to install with minimal risk and reduced installation time.

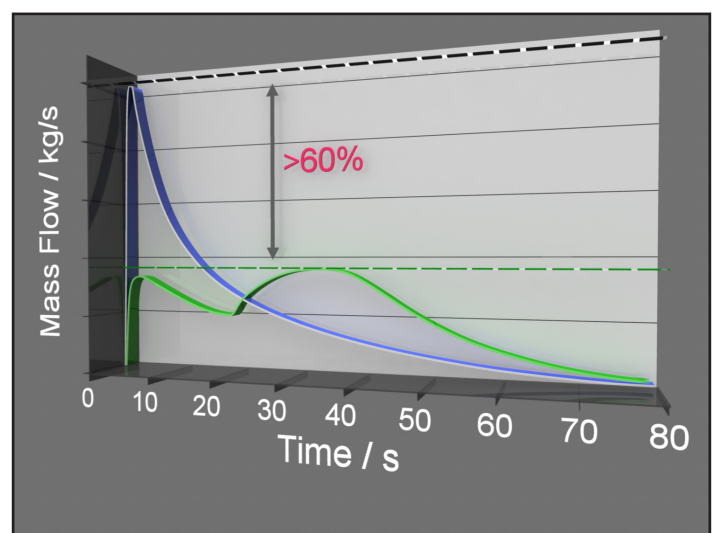
Controlled Flow Technology Explained

When an ordinary inert gas system is activated, the release pressure is initially high and steadily declines during the discharge. The system design includes pressure regulators or controllers and over-pressure venting to ensure that the pressure in the protected room is maintained at safe and acceptable levels at all times.

The ARGONITE® C60 System is a major advance on ordinary inert gas fire suppression systems. It uses an innovative cylinder valve assembly that significantly reduces the peak mass flow, releasing the gas at a lower and more controlled flow rate throughout the discharge.



New ARGONITE® C60 Controlled Flow valve



Fire Performance

ARGONITE® C60 is a total flooding system that extinguishes fires in enclosed rooms and spaces. It works by releasing ARGONITE® gas into the protected enclosure from storage cylinders through distribution piping and discharge nozzles. This reduces the oxygen concentration in the air from the normal 21% level to below the 15% level needed to support combustion. This extinguishing atmosphere is retained in the enclosure long after the discharge because the density of ARGONITE® is similar to that of air and so agent leakage is minimised.

The resulting increase in pressure inside the protected enclosure is managed by fitting pressure relief venting to its boundary. The size of the venting is determined by the peak mass flow of ARGONITE® for a specified enclosure pressure limit (eg. 500 Pa). The ARGONITE® C60 valve delivers up to a 60% reduction in vent size compared to an ordinary inert gas system.

Environment

ARGONITE® is a 50:50 blend of argon and nitrogen gases, both of which occur naturally in the atmosphere. Its environmental credentials include an Ozone Depletion Potential (ODP) of zero and a Global Warming Potential (GWP) of zero.

Safety

ARGONITE® is a safe and secure fire fighting solution, applicable for use in manned areas.

Clean Agents

ARGONITE® provides protection not only from fire, but also from the potentially damaging effects of extinguishing agents such as water and chemical powders. It is a transparent, odourless, electrically non-conductive and non-corrosive gas that does not produce any by-products when exposed to high flame temperatures.

System Design Software

Dedicated VdS software enables Engineers to design ARGONITE® C60 inert gas fire protection systems quickly and easily in accordance with international standards.

Approval

ARGONITE® C60 has been tested and approved to LPS1230 by the leading independent regulatory authority LPCB.



Applications

ARGONITE® C60 can be used to suppress fire in a diverse and challenging range of applications.

Data Processing

Data Centres, Computer Suites, Telecom Centres, Tape Storage Libraries, UPS Rooms, Financial Centres and Banks

Cleanrooms

Electronic equipment manufacturing, Medical and Laboratory Equipment, Biotechnology, Pharmaceutical and Medical Facilities, Operation Rooms, Universities and Colleges

Communications

Internet Service Providers, Switch Rooms, Control Centres, Cell Sites, Railway Signalling Centres, Air Traffic Management Centres, Military Installations

Heritage preservation

Art Galleries, Museums, Libraries, Classic Car Garages, Cultural Centres, Archive Stores

Power generation

Generators, Gas Turbines, Substations, Control Rooms

Oil & Gas

Offshore Oil and Gas Installations, Pipeline Pumping Stations, Petrochemical Plants

Kidde Fire Protection operates a continuous programme of product development. The right is therefore reserved to modify any specifications without prior notice and Kidde Fire Protection should be contacted to ensure that the current issues of all technical data sheets are used.

ARGONITE is a registered trademark of Kidde Products Limited

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