Kidde® Fire Systems Protection for Challenging Applications

When considering your fire suppression system needs, know that a Kidde Fire Systems Nitrogen system can be used in a variety of commercial and industrial applications.

Nitrogen is a naturally occurring gas that operates as a fire suppressant. Fire suppression is achieved by reducing the oxygen concentration where the fire will extinguish, while remaining at a level acceptable for human exposure for a short period of time.

Nitrogen System—Engineered for a wide range of applications

Room size and combustible material requirements determine the system design. A system consists of one or more cylinder with specialized equipment connected to a fixed pipe network. The engineered design selects appropriate pipe sizes and nozzles to ensure effective suppression. These systems will operate automatically via detection devices, manually from electric release stations or by manual pneumatic means.

Nitrogen Fire Suppression System Benefits

- Economical recharges with locally accessed agent
- Effective against fires involving many combustible materials and flammable liquids
- Can be stored at low ambient temperature
- Can be customized to discharge either automatically or manually
- Provides a total flooding suppression solution
- Requires no cleanup after a fire event, as the result of agent release
- Poses no threat to the environment (Zero ozone depletion/zero global warming)
- Will not damage protected equipment
- Non-conductive and can be used in environments where sensitive electronic equipment is present
- Safe for use in a wide range of applications where people are present
- Lacks oxidative qualities
- Low loss rate
- Complex pipe networking options
- Selector valves can be used for multiple hazards

When you choose Kidde, you’ve chosen the world’s most respected name in special hazards fire protection.
Nitrogen System Features:

Effective... Nitrogen is an inert gas that extinguishes fire based on the principle of oxygen depletion. In a closed space almost all fires are extinguished in less than 60 seconds when the oxygen concentration falls below 15%. Nitrogen reduces the oxygen concentration to approximately 12.5%. Nitrogen has a density nearly equivalent to air. This results in lower loss of agent during and following discharge. Nitrogen mixes uniformly for minimal agent stratification.

Safe... In occupied areas, people can breathe Nitrogen at extinguishing concentrations that are at acceptable levels for human exposure over short periods of time. There are no toxicological factors associated with its use and it will not decompose or produce any by-products when exposed to a flame. A Nitrogen discharge will not create a fogging effect therefore, vision is not compromised or obscured.

Fast-Acting... Most Nitrogen systems are designed to extinguish fires with a minimum agent concentration of 36% within the time prescribed in NFPA 2001.

Green... Nitrogen is an inert gas found naturally in the atmosphere. At room temperature it is a colorless, odorless gas. It is environmentally neutral, having zero ozone depletion potential (ODP) and zero global warming potential (GWP).

Recognized... By the top independent listing and approval agencies including ULC and FM.

Applications for the Kidde Nitrogen System:

- Control Rooms
- Rare Book Libraries
- Record Storage Facilities
- Electric Switch Rooms
- Universities and Colleges
- Art Galeries and Museums
- Substations
- Petrochemical Installations
- Telecommunication Center
- Financial Centers and Banks
- Pharmaceutical
- Offshore Oil and Gas Installations
- Medical Facilities

Approved for use with Chemetron Suppression Control Units:

- ARIES™
- ARIES NETLink™
- AEGIS™

Approvals & Listings

- Factory Mutual (FM)
- Underwriters’ Laboratories of Canada (ULC)

We are Kidde Fire Systems.

Kidde Fire Systems’ products save people and property from the dangers of fire. Our broad product offering and design expertise have been protecting assets worldwide since 1917. We’re the smart choice when early fire detection and suppression needs are especially demanding. To advance our leadership in the industry, our family of special hazard fire protection brands has united. Kidde Fire Systems now incorporates Chemetron Fire Systems and Fenwal Protection Systems. As Kidde Fire Systems, we will enhance our customer focus and partnerships, provide highly efficient service and training, preserve a deep combined expertise in an array of vertical markets, and accelerate our product and technology developments, to the advantage of everyone who benefits from a world made safer from fire.

One united company. Advancing fire protection.