



FK-5-1-12 VALUABLE ASSET FIRE PROTECTION

INTRODUCTION

FK-5-1-12 together with Fike's rapid detection and control equipment provides the superior level of protection necessary for high-value assets and businesses that can't afford business interruption, downtime or loss in revenue as a result of a fire. FK- 5-1-12 extinguishes fires at the molecular level, without reducing the oxygen supply of the protected space. It extinguishes fires by absorbing heat and interrupting the combustion reaction so a fire cannot sustain itself. Fires are quickly detected and extinguished before damage from smoke or flames can occur. Because oxygen levels are not affected by FK-5-1-12, it poses no threat to people, even those present at the time of discharge.

APPLICATIONS

FK-5-1-12 is a total flood fire extinguishing system designed to protect Class A, B and C fires for normally occupied spaces. Class-A fire assets represent greater than 90% of all applications. Typical applications include computer rooms, data storage, telecommunication switch stations, semi-conductor manufacturing facilities, clean rooms, libraries, museums, and historical sites. FK-5-1-12 extinguishing agent (Dodecafluoro-2-methylpentan-3-one) is an environmentally acceptable replacement for Halon due to its zero ozone depletion potential, a global warming potential of one and short atmospheric life-time. It is particularly useful where an environmentally acceptable agent is essential, clean-up of other media presents a problem, weight versus suppression potential is a factor, an electrically non-conductive medium is needed, and compatibility with people is an overriding factor.

THE PROBLEM: DOWNTIME

Fire's destroy business assets, and it is highly likely that a business that suffers a significant fire will never re-open. Relying on water-based systems for fire protection will meet your primary objective, which is to protect life and physical property. However, it will not protect the continuity of business or your information. Due to the speed of detection and suppression of a water-based system, a fire has more time to develop and grow. The damage caused by a developed fire in terms of smoke and combustion pollutants can be substantial. A water-based system can cause substantial damage as well, destroying electronics, documents and irreplaceable artifacts. Recovering from a fire extinguished by a water-based system is time-consuming and causes significant business interruption.



APPLICATION PROFILE

THE SOLUTION:

FK-5-1-12 possesses many physical properties which make it desirable as an asset fire protection system. Unlike traditional water-based sprinkler systems, FK-5-1-12 is non-conductive, non-corrosive, and leaves no residue, so it will not damage high-value assets, electrical components or pose a clean-up problem. Since FK-5-1-12 is discharged as a gaseous vapor, it rapidly penetrates enclosures to get to the source of the fire, reaching areas that water or dry chemical agent cannot.

Design and installation of an FK-5-1-12 system is easily accomplished by a qualified Fike distributor. The quantity of FK-5-1-12 agent is calculated for each risk area, and storage containers are installed and connected to a common manifold and pipe network which terminates at strategically placed discharge nozzles. The engineered design of the system ensures that FK-5-1-12 agent is released and distributed evenly throughout the protected space(s).

FK-5-1-12 uses unique mechanisms to prevent or extinguish a fire compared to conventional extinguishing agents such as water, dry chemical and carbon dioxide. These other suppression methods may cause collateral damage, significantly interrupt business productivity or present a safety risk. The unique mechanism FK-5-1-12 relies upon is its ability to absorb heat energy from the combustion reaction at a molecular level. The ability of FK-5-1-12 to absorb heat faster than it is generated, essentially ends the combustion reaction.

SELECTING A LONG-TERM CLEAN AGENT SYSTEM

The FK-5-1-12 system has the lowest environmental impact of any fixed chemical suppression system. Fike's FK-5-1-12 system supplies the ideal combination of performance, environmental and cost benefits to end-users seeking a fast-acting, non-damaging fire protection system. This combination of environmental, budgetary and performance benefits make the Fike FK-5-1-12 system a sustainable, long-term fire suppression solution. The Fike FK-5-1-12 system has received system approval by Factory Mutual Research Corporation (FM), Underwriters Laboratory (UL) and is included in NFPA 2001 and ISO 14520.