

# Protecting your most valuable assets



 **Kidde Fire Systems**

A UTC Fire & Security Company



## *Mission Statement*

*The mission of Kidde Fire Systems is to provide the highest quality and the most reliable fire detection and suppression systems for special hazard applications and to offer them to customers through our global network of authorized distributors.*

*Walter Kidde Sr.*

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# About **Kidde**

## TIMELINE

- 1917:** Walter Kidde & Company, Inc. was established in New Jersey.
- 1920s:** Added an important innovation to CO<sub>2</sub> cylinders of the original "LUX" technology—the siphon tube, which is still used today.
- 1925:** UL Technologies approved the first portable Bell Telephone type CO<sub>2</sub> fire extinguisher.
- 1925:** First industrial built-in systems were applied for use against inflammable liquid fires.
- 1926:** UL issued their first official approval of the Kidde LUX System for yachts.
- 1926:** In cooperation with the Navy Department, airplane engine fire protection was developed.
- 1946:** Developed the first halogenated agent fire suppression system in 1946—using chlorobromomethane (CB) for aircraft.
- 1947:** Engineered fire protection for locomotives was introduced.
- 1960s:** First to work with the US Army Corps of Engineers on Halon 1301 suppression.
- 1960s-70s:** Walter Kidde expanded its presence in fire protection by acquiring several fire protection technologies, making it a global fire protection manufacturer.
- 1990s:** Introduced FM-200®, the market leader of clean agents, and the ADS FM-200® System with patented Piston Flow Technology—an innovation in fire protection.
- 2000s:** Becoming the supplier with the largest portfolio of suppression agents, Kidde introduces 3M™ Novec™ 1230 Fire Protection Fluid, the agent for today and tomorrow.



The brand, Kidde, was founded in 1917 by Walter Kidde with the development of Walter Kidde's fire detection and extinguishing system for shipboard use. Early innovations of Kidde also include the first portable CO<sub>2</sub> fire extinguisher in 1925.

As the world's largest manufacturer of fire safety products, Kidde's mission is to provide solutions that help keep people and property safe from the effects of fire and its related hazards. For more than 90 years, industries around the world have relied on Kidde to deliver superior fire detection and suppression products and services.

Today, Kidde is owned by United Technologies (UTC, ticker: UTX), and is part of the UTC Fire & Security Division. UTC Fire & Security provides world-class capabilities in the Fire Safety and Security markets through several subsidiaries. UTC Fire & Security companies, each with a heritage of excellence in its respective segment, include Kidde, Chubb, Onity, Lenel and other industry leaders. With 43,000 employees and backed by a long history of quality and innovation, we are committed to delivering products and services to help keep people and property safe in 25 countries around the world.

Kidde Fire Systems is the world leader in special hazard fire protection system solutions. The Kidde Fire Systems portfolio of products include the largest suppression agent portfolio in the industry, a full detection line, control products and a variety of ancillary products, such as notification devices and fire extinguishers. Our global network of "Authorized Distributors" are available to assist you with everything from hazard analysis to system maintenance.

When you choose "Kidde", you've chosen the world's most respected name in fire protection.

# Product information

Unlike structural fire protection in which conventional methods, such as smoke detectors, manual fire alarms, water sprinklers and smoke control systems are used, every special hazard has its own unique set of requirements. The method for protecting a data processing center is very different than the approach used to detect and suppress a fire in the engine compartment of a 400 ton ore hauler used in the mining industry.

Kidde Fire Systems offers a unique approach to fire protection to these special hazards—integrated total system solutions. Kidde offers a complete fire protection package that starts with early fire detection and ends with quick fire suppression. The detection systems are connected to the control systems and on-guard 24-hours a day. The control system works as the brain of the system. When a fire is detected, it shuts down power to protected equipment, closes ventilation, sets off notification strobes and alarms, and operates the Kidde suppression system. In addition to the integrated system, Kidde also offers front-line fire defense with the Badger line of portable extinguishers, the most trusted brand of extinguisher in the marketplace.

Browse through the various industries that Kidde has selected to highlight the many system options that Kidde offers for fire protection applications found throughout the world.

## Listings/Approvals held by Kidde systems

ABS  
CSFM  
DNV  
FM  
IMO  
ISO  
Lloyds Register  
NYC MEA  
TC  
UL  
ULC/cUL  
USCG

### DETECTION

- SmartOne® Intelligent Smoke Detectors
- Conventional Smoke Detectors
- High-Sensitivity Smoke Detector (HSSD®)
- Infrared Flame Detector
- Detect-A-Fire® Heat Detector
- AlarmLine™ Linear Heat Detection
- LHS™ Linear Heat Sensor
- Chemetronics™ Heat Detectors

### CONTROL SYSTEMS AND ACCESSORIES

- ARIEST™ Intelligent Control Unit
- AEGIST™ Conventional Control Unit
- XV™ Control System
- Initiation Devices
  - Pull Stations
- Notification Devices
  - Horns/Strobes
  - Abort Stations

### SUPPRESSION SYSTEMS

- 3M™ Novec™ 1230 Fire Protection Fluid:
  - Engineered System
  - Marine System
- Argonite®
  - Engineered System
- Carbon Dioxide
  - Engineered System
  - Marine System
- FM-200®
  - ADS™ System using patented piston-flow technology
  - ECS System
  - In-Cabinet System
  - Marine ECS System
  - Marine SBS System
- FE-13™
  - Engineered System
- Industrial Dry Chemical
  - IND™ System
  - KVS™ System
- Wet Chemical
  - WHDR™ System

### FRONT LINE DEFENSE

- Badger Portables, including:
  - ABC Multipurpose
  - AR-AFF Foam
  - Brigade
  - BC Dry Chemical
  - Carbon Dioxide
  - Class K
  - Class D
  - Corrosion Resistant
  - Custom Chrome
  - Fire Force
  - Halotron 1
  - Non-Magnetic
  - Wheeled CO2
  - Wheeled Dry Chem
  - Water

# Distributor services

The global network of "Kidde Authorized" Fire Protection Distributors possess the knowledge and qualifications required to be known as "professionals" in the fire protection industry. All authorized Kidde Distributors are factory-certified in the design, installation and maintenance of Kidde products. This ensures that they are knowledgeable about national codes and standards, safety requirements and system features. As a result, the system user gets the most economical and viable solution to satisfy their fire protection requirements.

The Kidde network of Authorized Distributors offer the following services:

## **ASSET HAZARD ANALYSIS**

From an engine room to data centers, our global network of distributors have the right experience and tools to conduct a professional analysis of the assets and processes to develop the most appropriate fire protection solution.

## **SYSTEM DESIGN AND TECHNICAL SUPPORT**

Kidde distributors are trained to design custom fire protection solutions using proprietary Kidde software that meet applicable codes and standards. Kidde provides an Applications Engineering team to assist our distributors with system design whenever necessary.

## **INSTALLATION**

Kidde distributors provide timely installation of Kidde detection, suppression and control systems. They also strive to complete their work with the least possible interruption to business operations.

## **MAINTENANCE AND EMERGENCY SERVICES**

Kidde distributors offer the full spectrum of important post-installation services, ranging from code-compliant testing and maintenance to 24-hour emergency service.

For the full list of Authorized Kidde distributors, log onto [www.kiddefiresystems.com](http://www.kiddefiresystems.com) and select "Find a Distributor."



# Industries we protect



## DATA PROCESSING

Innovations in the speed and capacity of data processing hardware have exponentially increased the ability to store critical data. This has led to widespread use of electronic data storage and the expansion of data centers. Overheat and fire scenarios are becoming frequent with the demand on these centers to run 24-7.

Kidde offers the fastest and most reliable fire protection options for data center applications. The HSSD senses smoke in the incipient stage and provides very early warning of an event. Combined with a Kidde suppression system, such as the Kidde ADS System—ideal for space-conscious data centers because it can be placed outside of the protected area, a fire can be suppressed before you even know it happened.

### Applications:

- Computer Rooms
- Data Cabinets
- UPS Rooms
- Sub-Floors
- Electrical Rooms
- Tape Storage Libraries



HSSD



ARIES  
Control Unit



Clean Agent  
System

Badger Portable  
Extinguishers

## COMMUNICATIONS

We take for granted that electronic communication is portable, reliable and instantaneous. Yet, the expectation for on-demand information can come at a price—overheating of strained equipment. In many cases, communications facilities, such as ISPs, are unstaffed sites rendering this expensive equipment and hub for data flow vulnerable to fire.

Kidde offers an integrated fire protection system approach. The HSSD samples air particles 24-hours a day and detects smoke in its incipient stage; long before a human could detect an event. When a fire is detected, the ARIES releases the clean agent system, suppressing the fire without harming the expensive electronic equipment. The ARIES is accessible via the Internet and authorized personnel can securely log-on from anywhere in the world to check the status of a site.

### Applications:

- Switching Equipment
- Power & Battery Area
- Standby Engine Area
- Cable Entrance Facility
- Signal Processing Equipment
- Distribution Frame Areas
- Cell Sites
- Microwave Sites



HSSD



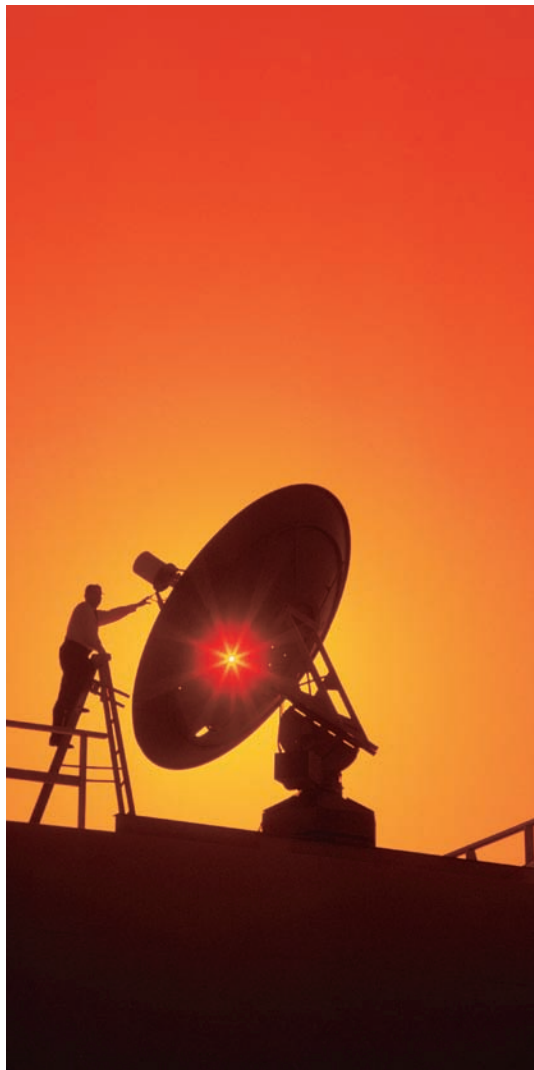
ARIES  
Control Unit



Clean Agent  
System



Badger Portable  
Extinguishers



# Industries we protect

## HERITAGE PRESERVATION

Museums, cultural resources and historic buildings all have at least one thing in common—they contain irreplaceable items that are likely to be damaged by fire and water.

Kidde aids in heritage preservation and offers a complete portfolio of clean agents that do not damage the assets of a building and do not leave any messy residues. These systems aren't a secret! Some of the World's most precious treasures are protected by Kidde. Some examples include: the original Star Spangled Banner, which is the flag that flew over Ft. McHenry in 1814 and was the inspiration for the US National Anthem written by Francis Scott Key.

### Applications:

- Art Galleries
- Classic Car Garages
- Cultural Centers
- Sealed Artifact Cabinets
- Media Galleries
- Vaults



HSSD



ARIES  
Control Unit



Clean Agent  
Systems



Badger Portable  
Extinguishers



## POWER GENERATION

Power generation facilities—whether hydroelectric, nuclear, or fossil fuel—contain a variety of fire protection needs. Business risks include capital investment and downtime for those depending on an uninterrupted supply of power. Kidde Fire Systems has a complete range of fire protection products to protect everything from the largest coal-fire plant, to the smallest gas turbines.

Kidde offers the appropriate solution for each application. For rugged, outdoor environments, Kidde Linear Heat Detection products are economical and reliable. For local applications of generators and other machinery, the Kidde Carbon Dioxide System is fast acting and tough on fire. Whereas, in areas likely to be occupied by personnel such as a control room, Kidde clean agent suppression systems are people-safe, safe on sensitive equipment and require no clean up after a suppression event, allowing operations to resume quickly and easily.

### Applications:

- Generators
- Substations
- Lube Oil Tanks
- Turbines
- Cable Trays
- Control Rooms
- Fuel Oil Tanks
- Storage Sheds



Linear Heat  
Detection



AEGIS  
Control Unit



Clean Agent  
Systems



Carbon Dioxide  
System

Badger Portable  
Extinguishers



# Industries we protect



## MINING

The isolated, harsh environments that test the limits of men and machinery in the mining industry—often miles from the nearest emergency services—pose high risk of loss in a fire-related incident. The potential threat to personnel, facilities, equipment and production mandates self-sufficient fire protection on site.

Kidde offers system solutions for every facet of mining operations: from extraction and transport to process control rooms and on-site power generation. We research, develop, test and manufacture fire detection, control and suppression products specifically for rugged mining applications. With the only group of their type, the authorized Kidde network of “WolfPack” Distributors connects the mining industry to the best special hazards fire

Applications:

- Generators
- Haulers
- Conveyors
- Refueling/Fuel Storage Areas
- Shovels
- Electrical Switchgear
- Draglines



Linear Heat Detection



IR-1 Flame Detector



KVS Vehicle System

Badger Brigade Portable Extinguisher

## COMMERCIAL COOKING

At Kidde, we understand one environment that demands proper fire protection is today's commercial kitchen. Couple high-temperature cooking appliances with ample fuel sources and you have the recipe for a potentially life-threatening, business-closing fire.

The Kidde WHDR Fire Suppression System was designed specifically for commercial cooking applications. The system utilizes Kidde APC wet chemical agent, which is proven to be the best suppressant for quick knock-down and the prevention of re-ignition of flame. By offering the most flexible system configurations in the kitchen industry, Kidde provides the most efficient protection available. The WHDR System allows for a variety of detection types, controls and cylinder sizes to fit any commercial cooking application and facility—whether it is an institutional cafeteria, a franchise or hotel restaurant, the corner diner, or a sidewalk bistro. The Kidde WHDR System guarantees more than compliance with UL Standard 300, NFPA 96, NFPA 17A and insurance codes—it provides protection from the devastation of a fire.

Applications:

- Ventilation
- Woks
- Ranges
- Griddles
- Fryers
- Char-Broilers



XV Control Head



WHDR System



Class K Wet Chem Badger Extinguisher



# Industries we protect

## MARINE

For more than 70 years, Kidde has provided automatic fire suppression systems to protect all types of marine vessels, their passengers and cargo from the devastation of a shipboard fire. Kidde's range of marine systems are appropriate for every size vessel—from yachts to aircraft carriers.

By their nature, seafaring vessels are at a greater risk of suffering the consequences of a fire-related catastrophe. The absence of emergency services, limited escape options and presence of flammable liquids while at sea make proper fire protection an absolute necessity.

Vast industry experience, extensive research and exceptional engineering has kept Kidde on the forefront of maritime fire protection. From Carbon Dioxide, to Novec 1230 fluid to FM-200, Kidde continues to offer the fastest, most reliable fire suppressants for use in the most advanced suppression systems on the market.

Whether a recreational, commercial or military vessel, Kidde delivers proven system solutions that have been tested and approved by marine regulatory agencies throughout the world.

### Applications:

- Generator Rooms
- Engine Rooms
- Pump Rooms
- Galleys
- Cargo Holds
- Machinery Spaces



SBS System



Marine ECS  
FM-200 System



Marine CO2  
System



Badger Portable  
Extinguishers



## MANUFACTURING

The manufacturing industry serves people and businesses in multiple sectors throughout the world; along with the wide array of products this industry produces comes a multitude of fire hazards too.

Manufacturing facilities often contain wave solder machines, paint mixing and spray booths, process control rooms, hazard material storage, long conveyor production lines that could overheat or other special machinery.

Kidde Fire Systems offers a complete portfolio of products to suit each fire protection application found in manufacturing environments—from Linear Heat Detection for conveyor belts to local application Carbon Dioxide Systems for wave solder machines to first line defense Portable Extinguishers—and the list goes on...

### Applications:

- Wave Solder Machines
- Paint Mixing Areas
- Paint Spray Booths
- Control Rooms
- Conveyor Belts
- Machinery Spaces
- Printing Presses



Linear Heat  
Detection



AEGIS  
Control Unit



Clean Agent  
Systems



Carbon Dioxide  
System



Badger Portable  
Extinguishers



# Industries we protect



## OIL & GAS

The danger of fire during the processing of petroleum products is always present and not to be ignored. Research indicates that these fires will continue to occur and will also increase in frequency due to the elevated levels of sulfur and heavy metals in the crude stocks.

The extraction, liquification, transportation and storage of natural gas, consisting primarily of highly-flammable methane, poses a significant risk of fire. Once ignited, LNG (liquefied natural gas) vapor clouds emit immense radiant heat capable of causing substantial damage to property and endangering lives.

Kidde continues to develop the most innovative fire suppression technology to meet the needs of high-risk industries. Suppression systems, such as the Kidde Carbon Dioxide System, deliver fire protection fast to minimize financial losses and maintain the operations' productivity.

### Applications:

- Pipelines
- Coker Units
- Blowdown Drums
- Fractionators
- Storage Tanks
- Distillation Towers



Linear Heat Detection



ARIES Control Unit



Carbon Dioxide System

Badger Portable Extinguishers

## STEEL

Few environments are as unforgiving as those of the iron and steel industries. The extreme temperatures necessary to process iron ore and other ferroalloys into steel make the threat of fire a risk too great to ignore. Heavy machinery such as ladle carriers and slag pot transporters are essential to the industry. Both vehicles move materials at more than 2000°F (1093°C), with slag pot transporters hauling slag directly from the blast furnace to the slag heap and ladle carriers transporting up to 400 tons of molten steel from basic oxygen or electric arc furnaces to the refinery. Without vehicles to perform these key operations, production would grind to a halt.

Kidde Fire Systems is the leader in special hazards fire protection because we understand that businesses operating in inordinate environments require extraordinary protection. The Kidde KVS Suppression System was engineered specifically to protect heavy machinery exposed to extreme conditions from fire-related damage.

### Applications:

- Slag Pot Haulers
- Wheel Loaders
- Ladle Carriers
- Haul Trucks
- Control Rooms
- Conveyors



Linear Heat Detection



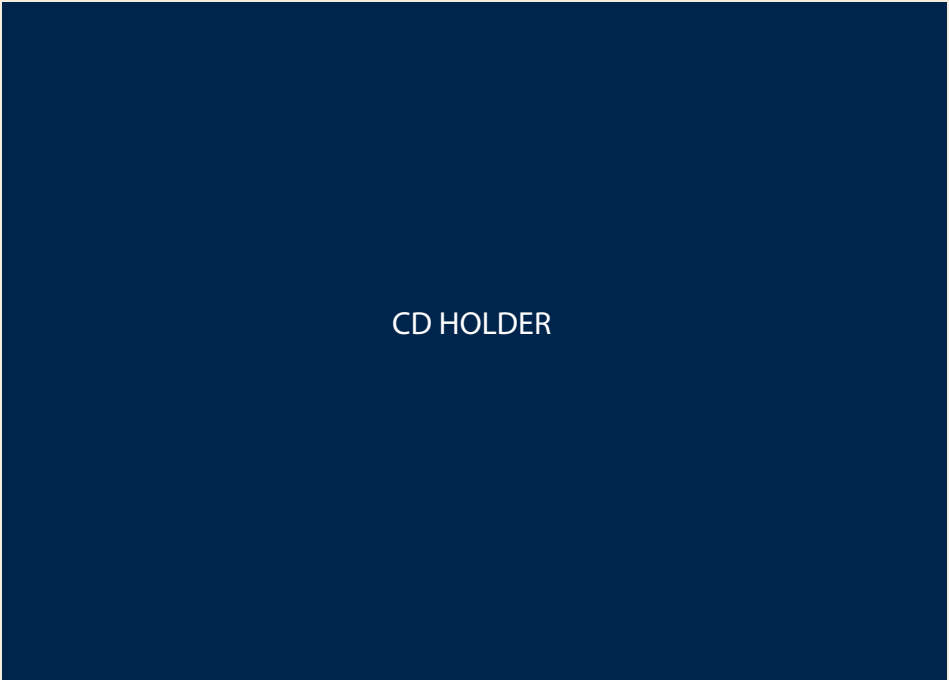
KVS Vehicle System



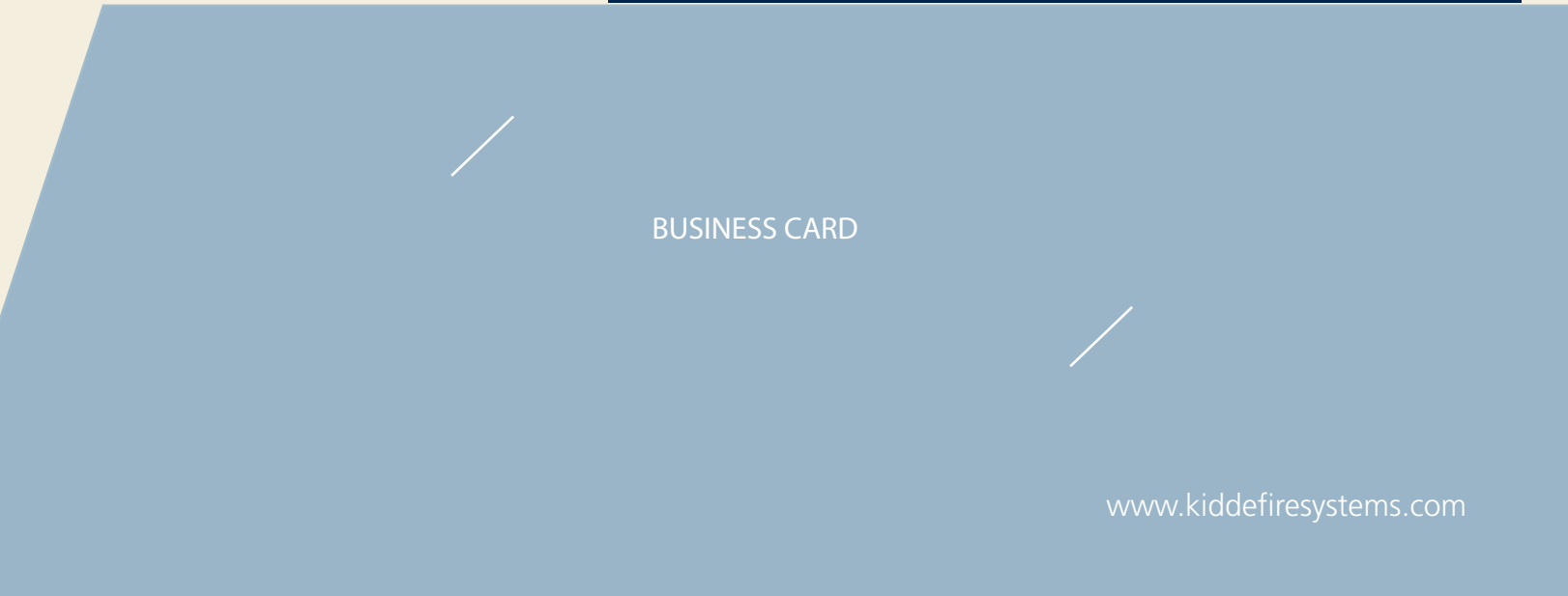
Badger Brigade Portable Extinguisher



Your Authorized Kidde Fire Systems Distributor is:



CD HOLDER



BUSINESS CARD

ADS, AEGIS, AlarmLine, ARIES, Chemetronics, IND, KVS,  
LHS, WHDR and XV are trademarks of Kidde-Fenwal, Inc.  
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3M and Novec are trademarks of 3M.  
Argonite is a trademark of Ginge Kerr.  
FE-13 is a trademark of DuPont.  
FM-200 is a registered trademark of Chemtura.



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