FIKE is growing around the world and beyond.

YOUR PRESCRIPTION FOR TOTAL SAFETY IS FIKE.

We deliver products to six of the seven continents – all but Antarctica.
We invest in the countries we serve, employing local people to manage our interests.
We have taken a leadership role in the protection of the earth’s ozone layer by offering environmentally friendly clean agent fire suppression systems – HFC-227ea.

ECARO-25, PROINERT.

Our products have been used by NASA for the Space Shuttle program and to reach the moon.

FIKE’S INTERNATIONAL CERTIFICATIONS
• ISO
• CE
• TÜV BAYERN SACHSEN
• ATEX
• NFPA
• UL
• FM

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PHARMACEUTICAL AND BIOTECH INDUSTRIES

BLANKET YOUR ENTIRE FACILITY WITH FIKE SAFETY.
Accidents can and do happen in the pharmaceutical and biotechnology industries. No matter how vigilant you and your staff may be, the possibility of a safety emergency still exists. Especially these days, when so many companies are trying to speed up production processes to gain a competitive advantage.

The potential result from such an event could be catastrophic. Recent studies indicate the average property loss due to an industrial explosion can easily reach $1 million (U.S.). And of course, no value can be placed on personal injury or the loss of life.

Only one company can offer you total safety.
Fike Corporation’s total safety program sets us apart from the competition. We are the only company that can identify all your safety hazards and blanket your entire facility with complete protection. Why settle for less?

Fike’s total safety program gives you total confidence.
To ensure that you enjoy a safe operating environment and uninterrupted production, we thoroughly examine your processes for potential dangers. At our extensive testing facility, we can easily replicate your operating conditions. Then, we can quantify your facility’s risk and determine the appropriate level of protection.

Don’t let your productivity go up in smoke.
There are many considerations in selecting fire protection. Do you need a fast fire detection and suppression system? Do you need to protect people, a process or expensive equipment? What is your budget and space constraints?
At Fike, we have a burning desire to help you. Using our total safety approach, the experts at Fike can analyze your entire facility and recommend a comprehensive plan of action that may include one or more of the fire protection products described here.

INDUSTRIAL FIRE PROTECTION

CARBON DIOXIDE (CO₂)
CO₂ Applications:
• Flammable liquids/storage
• Solvent recovery equipment
• Burn collectors
Carbon dioxide is an effective fire-extinguishing agent applicable to a wide range of fire hazards.
CO₂ Benefits:
• Colorless, odorless, electrically non-conductive
• Available for local application protection, or total flood protection in non-occupied enclosures
• Requires no clean up

MICROMIST®
Micromist Applications:
• Emergency Generators
• Machinery spaces
• Flammable liquid (Class B) process/storage
Micromist produces a fine mist to extinguish fires quickly with very little residual water.

EMERGENCY GENERATORS
Fike Corporation offers a full line of detection, alarm and release products from single-hazard panels to multi-zone analog addressable systems.
• Cheer® System
• Shark® System
• Rhino® System
• SB® Single-Hazard Panel
**CAN YOU FEEL THE PRESSURE?**

**SAFETY THROUGHOUT EVERY PROCESS**

**Fike can meet your exact requirements with Engineered Rupture Discs.** If your application requires a unique feature that is not offered in one of our standard Rupture Disc Assemblies, Fike has the expertise to design, test and manufacture precisely what you need. Just ask your Fike representative for assistance.

**FIKE’S CLEAN-IN-PLACE, STEAM-IN-PLACE TECHNOLOGY**

Through years of experience, Fike has discovered how to design and build overpressure products for the pharmaceutical and biotech industries. Our Rupture Discs, including the S™ (Sanitary x Safety x Scored) and SR-H Rupture Disc, feature technological innovations that are essential to CIP/SIP applications:

- **Hygienic/aseptic design**
- **Easy to clean without removing disc**
- **Disc installation is easy with Tri-Clamp® assembly**

**How Can Fike Help You?**

**Rupture Discs can be simple solutions to difficult problems.** Rupture Discs provide a leak-tight seal that remains secure under normal operating conditions. When pressure rises to a predetermined level, the disc ruptures in a predictable and controlled manner.

**Fike designs Rupture Discs specifically for your industry.**

We offer several Rupture Disc Assemblies that meet the demanding tolerances within the pharmaceutical and biotech industries. Our S™ (Sanitary x Safety x Scored) and SR-H Rupture Disc are just two of the high-performance assemblies our experts may recommend for your application. Here are its innovative features:

- **May be used with flush-mounted NA Connect® fittings**
- **Available with FDA-approved gasket materials: silicone, Viton®, EPDM, or Teflon®**
- **Available with electro-polished surfaces**
- **Suitable for liquid and vapor applications**
- **Ruptures without fragmentation**
- **Operates to 90% of the tolerance without premature failure**
- **Withstands full-vacuum rating**

**Primary Relief:** In some cases, all you need is one relief device. A quality Fike Rupture Disc prevents pressure in the vessel from rising above the maximum allowable working pressure (MAWP) of the vessel.

**Combination Relief:** When your application requires a Pressure Relief Valve (PRV), a Fike VALVEGUARD Disc is an excellent choice to isolate and protect the PRV from process media and exposure to contamination.

**Table:**

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<th>EQUIPMENT</th>
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<th>FORMULATION &amp; PACKAGING</th>
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**Key:**

- ☐ Explosion Protection
- ☐ Overpressure Protection
- ☐ Fire Protection
Don’t let a violent explosion be your company’s wake-up call.
In the pharmaceutical and biotech industries, thousands of dusts and flammable vapors are handled every day. All it takes is a little static electricity, a hot surface or smoldering nest to ignite these valuable ingredients. Unchecked, these minute chemical reactions can lead to intense explosions that can destroy equipment, enclosures or entire buildings.

Managing the risk of explosions is a two-step process.
First, we characterize the hazard. Then, we design protection strategies to mitigate the hazards. Fike is uniquely qualified as the world’s only single-source manufacturer to offer total Explosion Protection including all of the following:

**Explosion Testing**
Fike offers a wide range of bench-scale and industrial-scale tests to determine explosive characteristics of your process media and to validate our recommended protection strategies.

**Explosion Venting**
With products such as our V-max™ vent, Fike can help you relieve explosion overpressure conditions within process equipment before destructive levels of pressure can be reached.

**Flameless Explosion Venting**
Fike’s FlamQuench II™ provides explosion pressure relief without discharge of flames or dust. It’s an excellent alternative to indoor explosion venting with ducts.

**Explosion Suppression**
Fike products detect and extinguish an explosion in its very early stages before destructive levels of pressure can be reached.

**FIKE EXPLOSION PROTECTION PRODUCTS AND SERVICES**

**Explosion Isolation**
Fike can create mechanical or chemical barriers to prevent the spread of explosions through interconnected pipes or ducts.

FIKE ACCEPTS ANY CHALLENGE. WHAT’S YOURS?

**Facility:** Pharmaceutical plant that processes solvent-based materials.

**Challenge:** Plant manager does not know explosive characteristics of the process material.

**Solution:** Using explosion testing, Fike determines the explosive characteristics and recommends the best solution. In this case: Explosion Suppression and Chemical Isolation using flush-mount telescoping suppressant container nozzles.

**Facility:** Biotech facility operating an outdoor dust collector.

**Challenge:** Overpressure concerns in addition to rigorous requirements of hygienic service.

**Solution:** Fike’s V-max™ vents, just one of our many Explosion Venting options. Chemical Isolation is also necessary.

**Facility:** Pharmaceutical R&D lab.

**Challenge:** Protect indoor dust collector without incurring the high cost and space loss associated with vent ducts.

**Solution:** Fike’s Flameless Explosion Venting (e.g., FlamQuench II) and Chemical Isolation.
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Fike can analyze your entire facility and recommend a fire protection system to market, replacing Halon. Don’t let your productivity go up in smoke. There are many considerations in selecting fire protection. Do you need a fast fire detection and suppression system? Do you need to protect people, a process or expensive equipment? What are your budget and space constraints?

At Fike, we have a burning desire to help you. Using our total safety approach, the experts at Fike can analyze your entire facility and recommend a comprehensive plan of action that may include one or more of the fire protection products described here.

Don’t let a safety hazard shut down your business. At Fike, we understand the challenges you face in the pharmaceutical and biotechnology industries. Your production processes demand specialized equipment. And we’re up to the challenge. Throughout this brochure, you’ll find detailed information about Fike products that meet or exceed your CIP/SIP requirements, as well as our corrosion-resistant components that can be easily cleaned with no disassembly. For additional specifications, contact your Fike representative.

MICROMIST®

Micromist Applications:
- Flammable liquid (Class B) process/storage
- Machinery spaces
- Flammable liquid (Class II) process/storage

Micromist produces a fine mist to extinguish fires quickly with very little residual water.

CARBON DIOXIDE (CO₂)

CO₂ Applications:
- Flammable liquids storage
- Subsequent recovery equipment
- Data collectors

Carbon dioxide is an effective fire-extinguishing agent applicable to a wide range of fire hazards.

CO₂ Benefits:
- Colorless, odorless, electrically non-conductive
- Available for local application protection, or total flood protection in non-occupied enclosures
- Requires no clean up

CLEAN AGENT FIRE SUPPRESSION

Clean Agent Applications:
- Computer room (with subfloor)
- Control room
- Data processing area
- Clean room
- Any occupied space

HFC-227ea and the New ECARO

Clean Agent Benefits:
- Detects and suppresses fires rapidly
- People-safe
- Electrically non-conductive
- Three-dimensional protection
- Non-asset damaging
- Requires no clean up

Fike Corporation offers a full line of detection, alarm and release products from single-hazard panels to multi-zone analog addressable systems.

COMMERCIAL FIRE PROTECTION

Fike Corporation was founded in 1945 by skilled machinist Lester L. Fike, Sr. Today Fike has more than 200,000 square feet of manufacturing capability throughout the world. We also operate several technologically advanced research and development facilities.

WE’RE EXPERIENCED

For years, Fike has solved safety problems for industrial and business sector clients all over the world. We’ve delivered Overpressure Protection since 1947; Fire Protection since 1960; and Explosion Protection since 1976.

WE’RE COMPLETE

You won’t find a more comprehensive single-source for Explosion, Overpressure and Fire Protection Products anywhere in the world. We design, test and manufacture our entire line of protection products.

WE’RE INNOVATIVE

- Fike is the only single-source manufacturer of explosion protection products to achieve ISO 9001 certification.
- In 1994, Fike became the first manufacturer to bring a UL-listed and FM-approved, clean agent fire-suppression system to market, replacing Halon.
FIKE IS GROWING AROUND THE WORLD AND BEYOND

YOUR PRESCRIPTION FOR TOTAL SAFETY IS FIKE.

Our products have been used by NASA for the Space Shuttle program and to reach the moon.

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