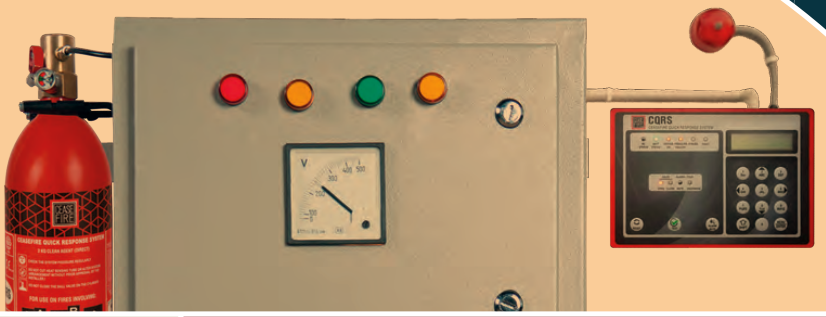
CEASE FIRE



CEASEFIRE

WORLD SERIES

Fire Suppression Systems

www.ceasefireworld.com

Made in India.
Ready for the world.


-1C2
L1
L2
L3
-5F1
ON
OFF
-X1.22

THE CEASEFIRE WORLD

Ceasefire is a fast-growing global brand that protects millions of people across the world every single day.

For decades now, we've pioneered fire safety in India, through firefighting systems and technologies that are unique to Ceasefire, and built at the very forefront of new-age technology.

Since its inception, Ceasefire has successfully manufactured, tested and sold thousands of extinguishers - in India and other parts of the world.

360 degree fire safety and security portfolio. Continuous innovation to create next-gen hi-tech products. A strong commitment to the Earth. High product quality standards. Strong execution. Competent after-sales service.

All this allows us to command a 20%-60% premium on our products. But rather than invest all our money in advertising and marketing budgets, we put it back into research and development. Yet, we are one of the highest recalled brands in the market, with the name Ceasefire becoming synonymous with fire safety.

Today, backed up by suppression systems, Watermist and Foammist systems, specialised gas total flooding systems, in-panel tube-based suppression systems and special application fire extinguishers, to name a few, our team of 2000 trained and enthusiastic professionals penetrate new markets and take Ceasefire to the world.

Our customer list is 500,000 strong, with 3000 new customers getting added every month.

CEASEFIRE AND THE INDIAN SUBCONTINENT

Ceasefire is ranked amongst the top fire safety brands in the Indian subcontinent.

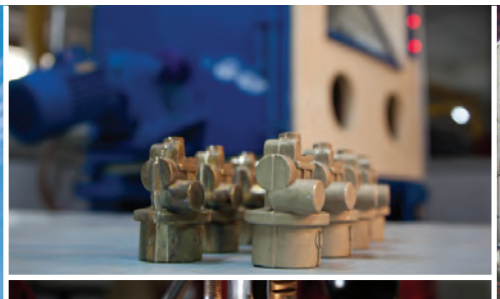
Airports, aircraft, the Indian Railways, ISRO, ships, factories, warehouses, malls, stadiums, offices, cars, hospitals, schools, houses, Indian Ordinance Factory, and DRDO Labs across the country are protected by Ceasefire.

And of course, millions of Indians who use these facilities.

Today, a Ceasefire product is sold every 60 seconds, and used in a real life fire emergency every 5 minutes. We've never let anyone down.

THE MANUFACTURING EDGE

In a market where many manufacturing units are little more than assembly operations, Ceasefire's products are deeply researched, quality-tested, and engineered to perform to the highest standards. Manned by over 200 skilled and semi-skilled employees, our manufacturing unit is equipped for backward integration on virtually every component of an extinguisher, from its outer body to the tiniest valve. This means a greater cost to us, but the resulting quality is faultless. As a result, Ceasefire products command a premium in the Indian market; and many of them are so unique in function and application, they have no competition in the market at all.



Ceasefire's products aren't just assembled, they are engineered to perfection and tested ruthlessly.

Deep investments in research and development help Ceasefire design products at the in-house Design Centre; and produce critical components at the hi-tech Ceasefire manufacturing unit in Dehradun, India.

The facility has an in-house valve manufacturing unit, and a world class deep draw machine equipped with an advanced hydraulics system.

There's also an advanced MIG CO_2 welding station with motorised technology that creates the strongest, smoothest seam joints.

A state-of-the-art paint shop for weather protection and seamless finish ensures no cracks, rusting or flaking.

And a testing lab where a battery of the most stringent in-ward and out-ward tests determine that only the best quality products are sold.

With a total production capacity of 4.8 lakh product per annum, this ISO 9001 certified facility complies to OHSAS, and has PED approval for pressure filling.

Finally, tie-ups with the world's leading OEMs to customise components to our exact specifications ensure nothing but the best products.

Products that guarantee quality. Products that comply with EN3, MED, EN1866, PED and FPC requirements. Products that are ready for the world.

PRODUCT INNOVATORS. MARKET LEADERS.

Ceasefire was built to have a comprehensive product eco-system, with the infrastructure, technology and knowhow to offer complete solutions to any and every industry.

When you partner with us, you get access to our state-of-the-art products, specialised design team, knowledgeable manufacturing team and enthusiastic sales team.

The Ceasefire Eco-system:

Wide range of Portable & Trolley Mounted Fire Extinguishers

ABC Powder, Water & CO_2-based extinguishers. Certified to EN3 / EN1866 standards.

Portable & Trolley Mounted Watermist-based Extinguishers

Exclusive range of Watermist-based portable and trolley mounted fire extinguishers, ready to fight large fires without any collateral damage.

Special Application Fire Extinguishers

Feature-full Clean Agent, Wet Chemical and Special Agent for Class B and Metal Fire-based fire extinguishers.

Designer Series Home & Car Fire Extinguishers

ABC Powder & Clean Agent-based fire extinguishers that come in aesthetically pleasing designs and colours.

In-Panel Tube-based Fire Suppression System

Certified by LPCB for LPS1666 Standard Certification for 2 and 4 kg HFC227ea and HFC236Fa gas variants.

Kitchen Hood Fire Suppression Systems

Watermist and Wet Chemical-based Systems. Certified by LPCB for LPS1223 Standard Certification.

Watermist-based Suppression Systems

Watermist-based Systems for exclusive application in offices, warehouses, factories, generator and transformer areas.

Specialised Gas-based Suppression Systems

HFC227ea-based System, available in both Engineered and Pre-engineered variants.

Hydrant Systems

Completely independent Watermist-based Hydrant Systems.

Special Firefighting Systems

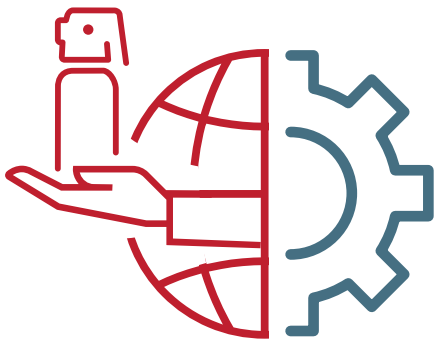
Advanced firefighting systems that are the first of their kind in the world.

Technological leader. Demand generator.

As technology leader and continuous product innovator, Ceasefire plays a dual role.

1

As a demand fulfiller in existing markets, with superior quality products that command a premium of over 20%.



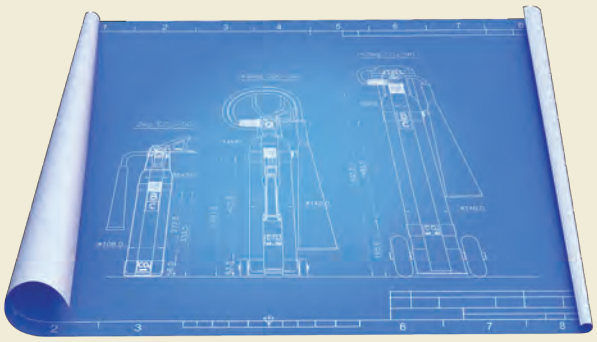
2

As a demand denerator, we introduce new products in new proprietary markets to create demand.

Through this extensive fire safety product portfolio, unmatched quality and knowhow, and by bringing high-end products to existing, new and lower market denominators, we've been known to open market opportunities exponentially for Ceasefire's Partners.

PARTNER WITH CEASEFIRE.

When you join hands with us, you get all Ceasefire's facilities, services and advantages at your disposal.



Design and technology support to Business Partners is part of Ceasefire's offering. We've put together a customised knowledge transfer module that makes Partners totally independent when it comes to product design capabilities. It's all taken care of by our team of highly experienced engineers and designers, all specialists in their field and informed on the latest global fire safety norms and standards.

Ceasefire's support extends to training the Partner's Technical Execution Team and offering a standardised module for a **Product Demonstration Facility set up**.

Ceasefire has embedded training and development into our system, building a unique competitive advantage.

Ceasefire Academy of Forging Excellence (CAFE):

Most advanced online training platform that has an outstanding reservoir of knowledge in the domain.

Blended Learning Programmes:

Combine classroom led learning with on-the-job training.

Ceasefire Advanced Intelligence Centre (AI Centre):

A state-of-the-art product demonstration and training facility where real life fire simulation exercises are carried out.

Ceasefire also brings strong marketing support to the table. Marketing collaterals, including brochures, flyers, product films and customer testimonials, are always available. The website and mobile apps created are designed for maximum viewer convenience. Engaging social media campaigns build thought leadership awareness. Aggressive BTL and on-ground promotions run through the year to keep the brand visible.

And finally, the central marketing team creates scalable customer promotion modules to generate more business.

In-house Customer Connect Cell

In-house Digital Marketing Expert

A full-fledged Creative Agency that provides art and copy support

In-house SMO Team

In-house SEO Expert

In-house Customer Enquiry & Complaint Management System

This is the time to Partner with Ceasefire - a company that's set to define the markets of tomorrow.

INTERNATIONAL CERTIFICATIONS. ONE COMPANY.

Ceasefire's quality is endorsed by leading certification agencies across the world. We're so confident about our manufacturing process and finished products, that we've submitted our products before every leading certification agency across the globe - to see if they hold up against the most stringent, highly brutal testing criteria. Not only did every Ceasefire product meet every parameter, but in some cases surpassed it. Today, Ceasefire products conform to the highest global standards, and carry a host of national and international certifications; including EN3, EN1866, MED, PED, ISO 9001 and OHSAS.

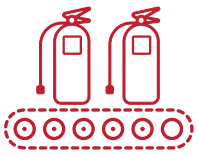
What do these Global Certifications actually mean?

Ceasefire has product quality certifications from multiple leading certification agencies. Each of these agencies epitomise safety and performance standards, and have laid out some of the most stringent test criteria in the world.

Each certification dictates unique testing criteria. MED, for example, rigorously tests products for functional efficiency in high humidity areas. PED puts special emphasis on pressure holding capabilities. LPCB & BSI take a more holistic view of things, thoroughly checking everything from the procurement of raw materials to the production line, the performance of the product on a customer's premises, and also the after-sales service provided. Ceasefire has passed them all.

The very fact that our products qualify against these standards is a testimony that we take our job of saving lives very, very seriously, and continue to raise our product quality standards.

Tests at European Union-certified Labs



Factory Production Control (FPC)

Audits on After Sales Services

Market Checks

Ceasefire's Product Certifications:

BIS:
The ultimate, all encompassing Indian test standards set to ultimate Indian conditions.

EN3 (LPCB & BSI Standards Certification):
The small, portable extinguisher test comprises of 10 progressively tough tests.

EN1866 (LPCB & BSI Standards Certification):
This test is set for larger extinguishers, like trolley mounted extinguishers.

MED (Marine Equipment Directive - LPCB Certification):
A benchmark certification for products to be used on ships, offshore oil rigs and other marine industries. This difficult certification guarantees that the extinguisher is capable of withstanding high salt and humidity.

PED (Pressure Equipment Directive - LPCB Certification):
PED is one of the biggest European standards. It involves a specialised test that checks the extinguisher's pressure, welding, documentation and the manufacturing process of the product.

Horseshoe Mark (LPCB Certification):
This is LPCB's main certification mark that's awarded to products which have all the above certifications in place.

Kite Mark (BSI Certification):
By British Standards Institution, it's awarded to products that have EN3, EN1866 and FPC certifications

With our global certifications in place, Ceasefire is now licensed to sell a host of lifesaving products across the globe. Come partner with us.

Product certifications mentioned in this document are subject to change. Please refer the company website for latest status.

CONTENTS

FIRE SUPPRESSION SYSTEMS


CEASE FIRE
CEASEFIRE QUICK RESPONSE SYSTEM
2 KG CLEAN AGENT (DIRECT)
CHECK THE SYSTEM PRESSURE REGULARLY
DO NOT CUT HEAT SENSING TUBE OR ALTER SYSTEM ARRANGEMENT WITHOUT PRIOR APPROVAL OF THE INSTALLER !
DO NOT CLOSE THE BALL VALVE ON THE CYLINDER
FOR USE ON FIRES INVOLVING:
A
B
MANUFACTURED BY: CEASEFIRE INDUSTRIES PVT. LTD., E-6, SELAQUI INDUSTRIAL ESTATE, DEHRADUN - 248197, UTTARAKHAND
CEASEFIRE QUICK RESPONSE SYSTEM
4 KG CLEAN AGENT (INDIRECT)
CHECK THE SYSTEM PRESSURE REGULARLY
DO NOT CUT HEAT SENSING TUBE OR ALTER SYSTEM ARRANGEMENT WITHOUT PRIOR APPROVAL OF THE INSTALLER !
DO NOT CLOSE THE BALL VALVE ON THE CYLINDER
FOR USE ON FIRES INVOLVING:
CEASEFIRE QUICK RESPONSE SYSTEM
9 KG CLEAN AGENT (INDIRECT)
CHECK THE SYSTEM PRESSURE REGULARLY
DO NOT CUT HEAT SENSING TUBE OR ALTER SYSTEM ARRANGEMENT WITHOUT PRIOR APPROVAL OF THE INSTALLER !
DO NOT CLOSE THE BALL VALVE ON THE CYLINDER
FOR USE ON FIRES INVOLVING:

HFC 227ea
FLOODING SYSTEM

Offices, server rooms, data centres... any area where heavy-duty electronics, computers, etc, are stored tend to be prone to fire. Not only does the presence of electricity, equipment, wiring and complicated circuitry leave the area vulnerable to fire, an overload or system shutdown could cause an energy imbalance that results in a sudden blaze.

And putting out the fire doesn't necessarily mean the end of your troubles either. The reality is, in a fire situation many fire suppression systems cause major damage, and even destroy the very things they are supposed to protect.

Introducing Ceasefire HFC 227ea - the most revolutionary firefighting system like no other. Brought to you by the only Indian company manufacturing these systems with world leader DuPontTM – Ceasefire.

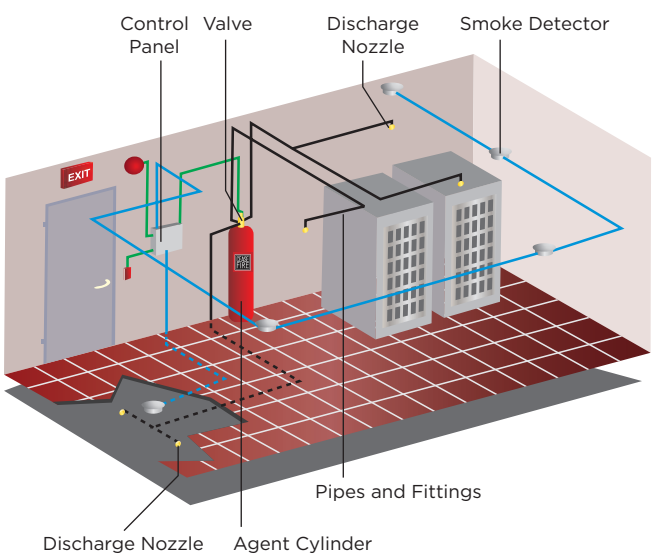
HFC 227ea has been specially created to suppress fire by reaching extinguishing levels in seconds, reducing the oxygen supply to below combustion levels and stopping ordinary, electrical, and flammable liquid fires before they cause significant damage. That's the fastest fire protection available, period!

How the system works

The detectors sense a rise in temperature above normal, particles of smoke, or a change in air quality, and alert the Control Panel. Which, in turn, activates the system and triggers a high-pressure solenoid valve that releases the HFC 227ea gas from seamless cylinders to the nozzle via a flexible piping network. A hooter goes off simultaneously, warning personnel to clear the area while the extinguishing agent is dispersed.

80% of HFC 227ea's firefighting effectiveness is achieved through heat absorption, and 20% through direct chemical means (action of the fluorine radical on the chain reaction of a flame). The system harnesses cutting-edge technology and has been designed for commercial enterprises and industries. Activating instantly in case of fire, it requires no monitoring.

The HFC 227ea Flooding System can also be manually activated. When a fire is detected, the system is actuated. Large quantities of extinguishing agent are released through wide-range nozzles that give the agent more reach. This effectively 'floods' the area, reduces the concentration of oxygen in the air and efficiently puts out the fire. Being self-activated, the system offers protection from fire 24 x7, whether anyone's around or not.



THE COMPLETE SYSTEM

The HFC 227ea Flooding System is designed to conform to IES 15519, the National Fire Protection Association (NFPA) 2001 and ISO/PF 20885 standards.

The system comprises various components that come together to create an unbeatable suppression system.

Agent Tank

Valves and Actuation Line

Nozzles

Pipes and Fittings

Detection Devices

The HFC 227ea Control Panel

Benefits of the Ceasefire HFC 227ea Flooding System

A, B, C, F	**Classification** Works on class A, B fires and fires involving electrically-charged devices. Effective on a wide range of flammable and combustible materials.
	Electronics-Friendly Shown to be electrically non-conductive and is safe for electrically charged equipment, it is kinder on electronics than the majority of extinguishing agents available in the market.
	Ozone, Environment-Friendly Being a clean agent, this is an eco-friendly alternative to chemical and water-based extinguishing systems. As HFC 227ea already exists as a gas in the Earth's atmosphere and is one of the by-products of combustion, it does not harm the Earth's stratospheric ozone layer. Its atmospheric lifetime is minimal.
	Superior To Other Gas Agents HFC 227ea is superior to other gas-based extinguishing agents that have lower boiling points and tend to be corrosive.
	High-value Risk Protection Suitable for protection on a range of high-value risks as it virtually eliminates damage to high-tech equipment, artwork and other delicate and sensitive objects.
	No Clean-up Required After Discharge After a discharge, the extinguishing agent can be removed by simple ventilation.
	24-hour Protection Automatic detection and actuation controls ensure fire protection is always 'on'.
	Multiple Triggers The system can be triggered either by the manual actuation system or through the automatic detection system.
	Speedy Deployment, Minimal Downtime Deploys quickly, reaching extinguishing levels in 10 seconds or less, stopping ordinary combustible, electrical, and flammable liquid fires before they cause significant damage. When a fire is extinguished this quickly, it means less damage, lower repair costs, and an extra margin of safety for people. It also means less downtime and disruption of business.
	Lower Storage Requirements In applications where space is at a premium, HFC 227ea fire suppression systems are the superior choice. Stored in cylinders as a liquid and pressurised with nitrogen, HFC 227ea systems take up to seven times less storage space than any system based on CO_2 and inert gases.

0:10	**Highly Effective** Not only does HFC 227ea work in 10 seconds, it prevents re-ignition by rapidly cooling down temperatures in the surrounding area.
	Highly Reliable A fully assembled and 100% tested mechanical control head ensures reliable operation. A pressure gauge on the valve marks the gas levels so maintenance staff can replenish it whenever required. Protective nozzle covers keep nozzles free from contamination and blockages by grease or other by-products that could inhibit the proper discharge of the extinguishing agent.
	Globally Utilised HFC 227ea is the only globally accepted flooding system gas and is in use in over one hundred thousand applications, in more than 70 countries.
	Residue-Free Being a clean agent, it won't leave behind oily residue, particulate or corrosive material.
	Superior Quality HFC 227ea is UL listed gas.
	Highly Adaptable Existing Halon/CO_2 control systems can easily be adapted for use with HFC 227ea.
	Unobtrusive Design Flexible piping configurations allow for a streamlined design and convenient installation that will not interfere with office workflow.
	Highly Flexible Available in a variety of sizes that can be customised as per the application. Its flexible configuration and design can easily accommodate changes to the layout or expansion of the area.

APPLICATION AREAS:

Offices

Theatres

Petroleum Storage

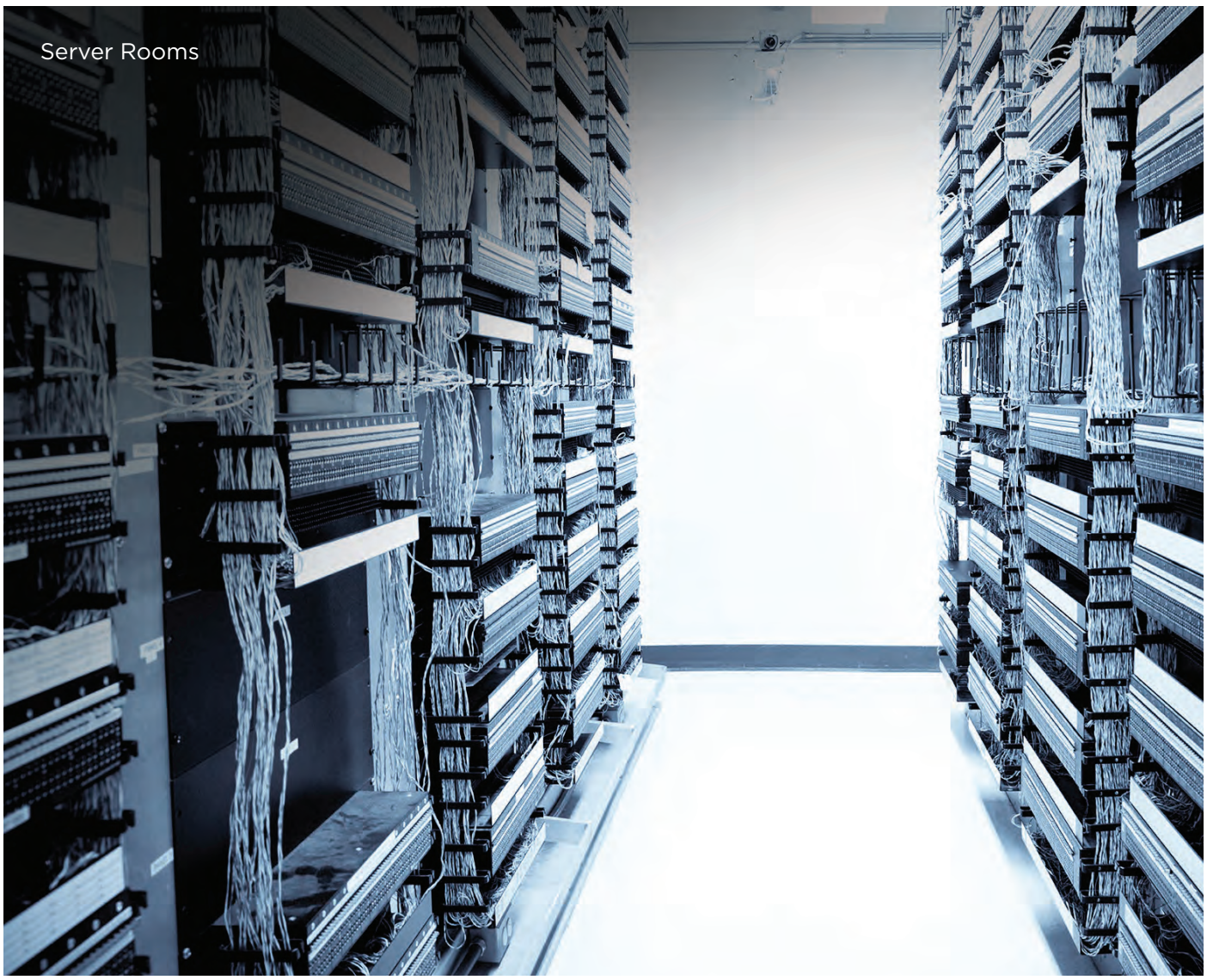
Parking Lots

Medical Equipment

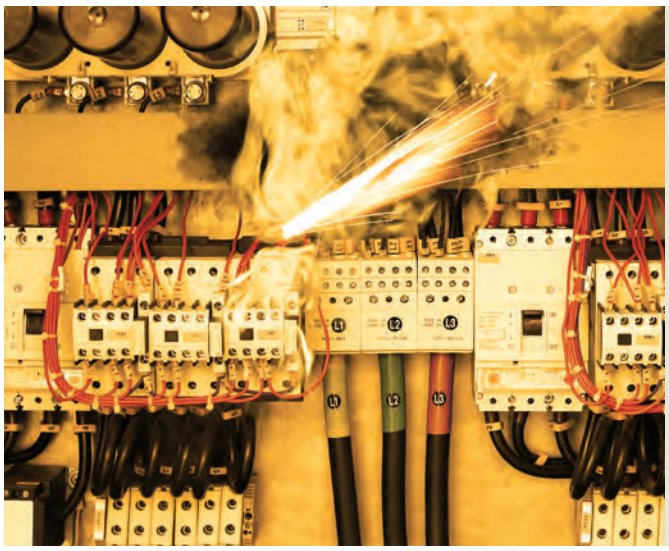
Storage Areas

Factories

Battery Rooms



IN-PANEL TUBE-BASED MICRO ENVIRONMENT SUPPRESSION SYSTEM (CQRS)



Research shows that most fires start with a spark in electrical mains, in the wiring in the server, in a genset or deep in an automobile engine or industrial machinery. And by the time you actually spot the fire and can take action, it's already too late because everything inside has already been destroyed by the fire.

These are perhaps most dangerous of all fires. And there's just one way to deal with them: instant detection and swift firefighting. But how do you detect a fire you cannot even see? And even if detected, how do you effectively fight it in an area that is difficult to access?

Ceasefire's In-Panel Tube-Based System (CQRS) is a revolutionary firefighting solution which combines ground-breaking technology with functional simplicity to keep what's precious safe.

The most prominent feature of CQRS is the specially designed heat-sensitive pneumatic polymer tubing. It's connected at one end to a Ceasefire extinguishing agent container, while the rest of it runs unobtrusively throughout the area at risk. When the flame comes in contact with the heat-sensitive tubing and reaches a temperature of 80° - 90°C, the tubing bursts open at that exact spot and forms a miniature nozzle.
The pneumatic mechanism triggers the valve of the extinguisher and sprays the extinguishing agent out of the tube directly onto the flame, dousing the fire instantaneously. Because the extinguishing agent used is a clean agent*, this system is effective to combat any kind of fire.
This revolutionary technology makes this system entirely self-activated, and requires no human intervention once it has been installed.
This makes it especially beneficial for "microenvironments", or areas where the fire hazard is likely to be in an enclosed space (such as a server or a genset).

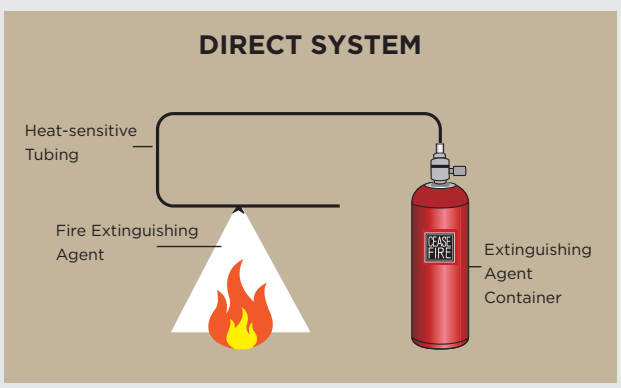
*HFC236fa and HFC227ea is UL Certified gases

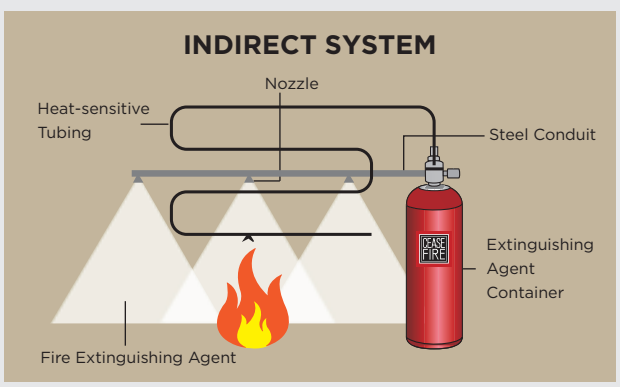
CUSTOM-MADE SOLUTIONS

CQRS operates on two different technologies – Direct and Indirect.

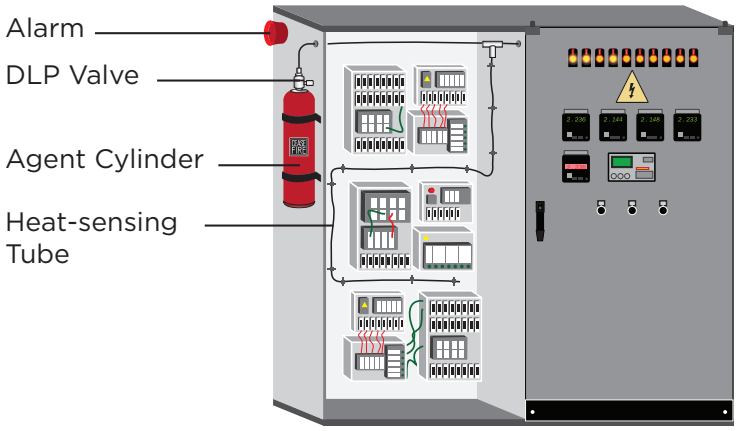
In the **Direct system**, the heat-sensitive tubing also acts as an extinguishing agent delivery system. When a fire is detected, the tube bursts at that point, forms a miniature nozzle and sprays the extinguishing agent. Ideal for places where fires can break out in localised areas.

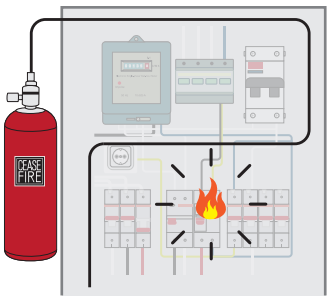
In the **Indirect system**, the heat-sensitive tubing only acts as a detection device. In the event of a fire, the extinguishing agent is delivered through a steel pipe and sprayed across the entire area through strategically placed nozzles. Ideal for areas where there is a chance of ignition of fires at multiple points. Both are available in low and high pressure variants.



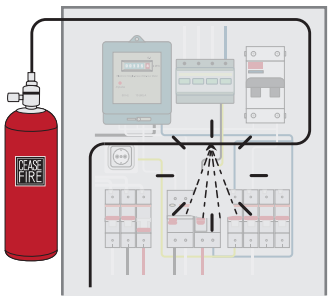


HERE'S HOW CQRS WORKS





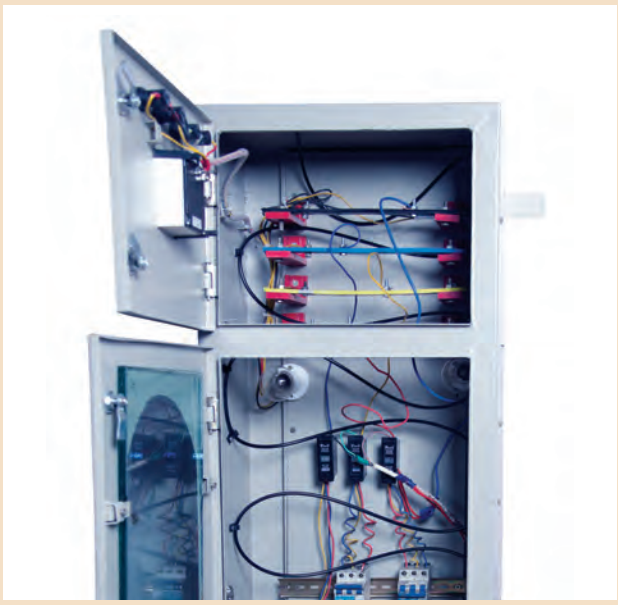
The single heat-sensitive polymer tube is connected to an extinguishing agent container via a pressure release valve. When a fire breaks out, it results in a drastic increase in temperature.



When it reaches 150° - 180°C, the heat-sensitive tubing bursts and releases the extinguishing agent through the direct or indirect line.
The extinguishing agent is sprayed out of the container, flooding the microenvironment and instantly extinguishing the flame.

CEASEFIRE'S LOW PRESSURE IN-PANEL TUBE-BASED SYSTEM (DIRECT)

Ceasefire's Low Pressure In-Panel Tube-Based System (Direct) is an ideal solution in case of fire in a single location, whether small or large. It uses Ceasefire's UL listed gas HFC227ea & HFC236fa as an extinguishing agent.



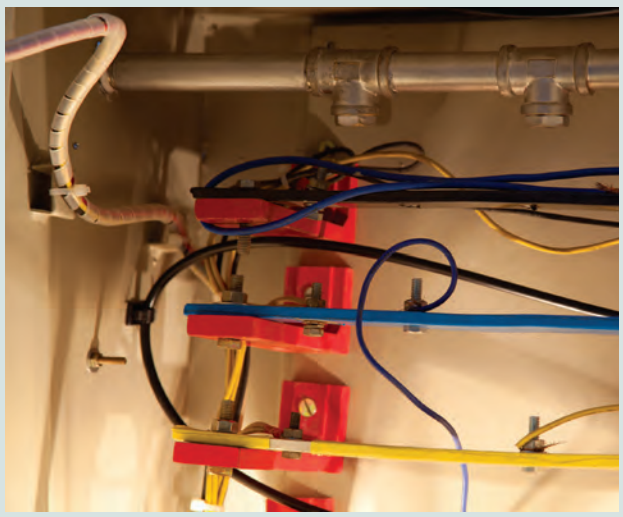
While Ceasefire's Low Pressure In-Panel Tube-Based System (Direct) can be designed to suit the specific needs of the premises, it is also available over the counter in 4 pre-fabricated variants - 2 kg, 4 kg, 6 kg and 9 kg.

CEASEFIRE'S HIGH PRESSURE IN-PANEL TUBE-BASED SYSTEM (DIRECT)

Ceasefire's High Pressure In-Panel Tube-Based System (Direct) is a perfect solution in case of fire in a single location, best suited for areas ranging from large to very large in size. This system uses highly pressurised CO_2 as the extinguishing agent.

Ceasefire's High Pressure In-Panel Tube-Based System (Direct) is designed to suit the individual needs of the premises, after careful inspection and assessment by the Ceasefire Design Cell, but is also available in 3 pre-fabricated variants - 2 kg, 4.5 kg and 6.8 kg.

CEASEFIRE'S LOW PRESSURE IN-PANEL TUBE-BASED SYSTEM (INDIRECT)



Ceasefire's Low Pressure In-Panel Tube-Based System (Indirect) varies structurally from the Low Pressure In-Panel Tube-Based System (Direct), and is ideal for situations where fire could break out in multiple locations at the same time. It uses Ceasefire's DuPontTMFE 36TM or HCFC 123 extinguishing agent.

While Ceasefire's Low Pressure In-Panel Tube-Based System (Indirect) can be designed to suit the individual needs of a property, it is also available over the counter in 4 pre-fabricated variants: 2 kg, 4 kg, 6 kg and 9 kg.

CEASEFIRE'S HIGH PRESSURE IN-PANEL TUBE-BASED SYSTEM (INDIRECT)

The Ceasefire High Pressure In-Panel Tube-Based System (Indirect) varies structurally from the High Pressure In-Panel Tube-Based System(Direct), and is ideal for situations where fire could break out in multiple locations at the same time, spread out over a vast area.

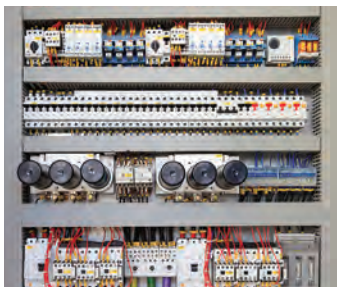
This system uses highly pressurised CO_2 as the extinguishing agent. The Ceasefire High Pressure In-Panel Tube-Based System (Indirect) is designed to suit the individual needs of the premises, after careful inspection and assessment by the Ceasefire Design Cell.

KEY FEATURES

ABC	**Classification:** Works on class A, B, C fires and fires involving electrically-charged devices. Effective on a wide range of flammable and combustible materials.
	Self-actuated: Does not require any power supply and will function normally in the event of a power outage.
	Electronics-Friendly: Shown to be electrically non-conductive and is safe for electrically charged equipment, HFC 236 is kinder on electronics than the majority of extinguishing agents available in the market.
₹	**High-value Risk Protection:** Suitable for protecting a range of high-value risks as it virtually eliminates damage to high-tech equipment, artwork and other delicate and sensitive objects.
	No Clean-up Required After Discharge: After a discharge, the extinguishing agent can be removed by simple ventilation.
	Residue-free: HFC 236 being a clean agent, won't leave behind oily residue, particulates or corrosive material.

	24-hour Protection: Automatic detection and actuation controls ensure fire protection is always 'on'.
	Flexible Design: Flexible tubing allows protection in areas that are difficult to access and may not be able to accommodate any other means of detection.
	International Quality Standards: The Ceasefire Quick Response System – M is manufactured to the highest global and national standards like LPCB, ISI and CE.
	Rugged System: Can withstand even harsh conditions where other types of detection systems might be rendered inadequate.
	DLP Tube Based Suppression System: 2 kg and 4 kg come with LPS1666 approval and use HFC227ea/HFC236fa UL Listed gas.

APPLICATION AREAS:



Electrical Panels

Server Racks

Electrical Cabinets

Mobile Tower Switching Areas

Diagnostic Machines

Gensets

Printing Press

UPS Rooms

Certified by LPCB for LPS1666 Standard Certification for 2 and 4 kg Direct HFC227ea and HFC236Fa gas variants.

SERVER QUICK RESPONSE SYSTEM

High-end servers, wiring and complicated circuitry make server rooms and data centres vulnerable to fire. An overload or system shutdown could easily cause an energy imbalance that results in a sudden blaze. While existing firefighting systems secure the whole room, they are not designed to protect your equipment.
A fire can cause loss of vital information, reputation, and significant expenses in replacing damaged servers, downtime, and sometimes, a full shutdown.

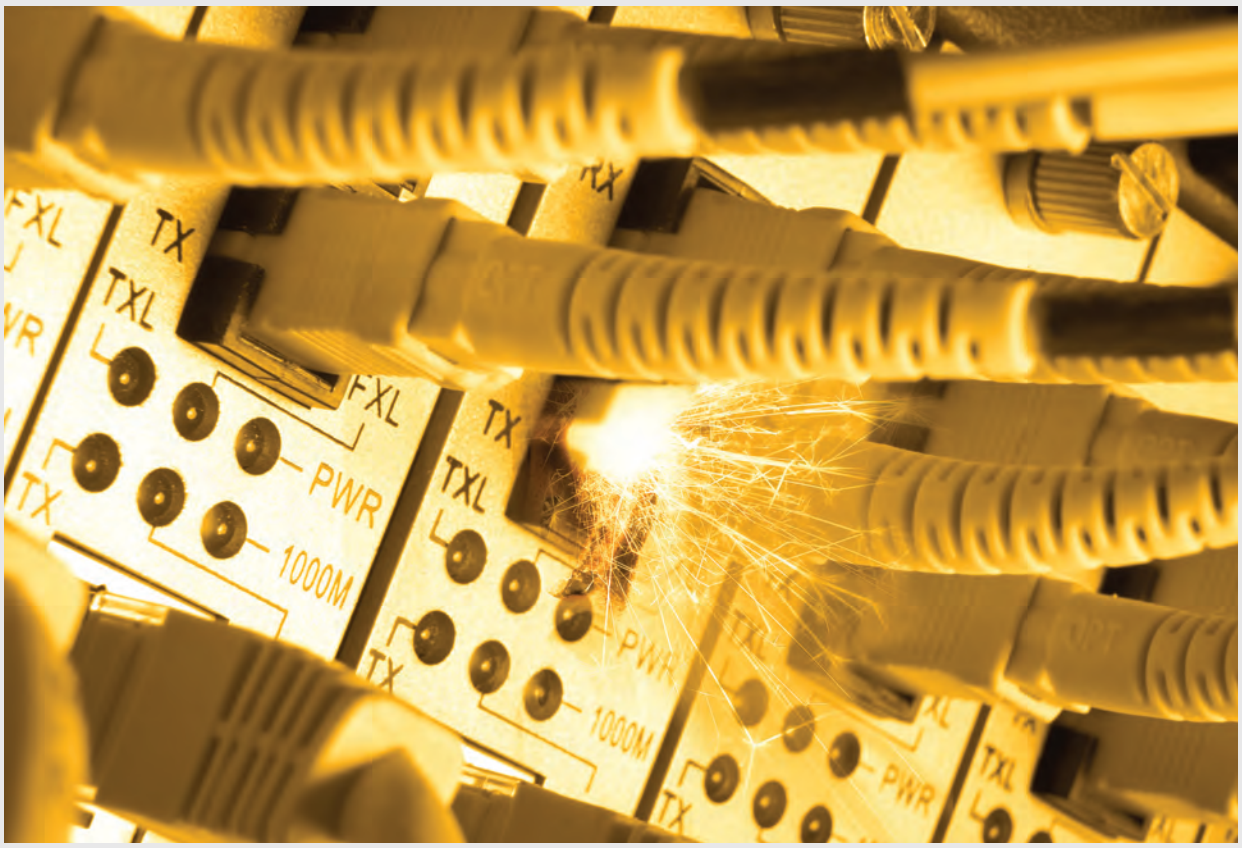
SQRS is powered by HFC 227ea - the cleanest extinguishing agent known to man. This fully automated, independent suppression system is perfect for an individual server. It is designed to slot into your existing server racks and quell a fire within seconds of detection.

What's more, since HFC 227ea is a completely clean, gas-based extinguishing agent, it puts out a fire without causing any collateral damage to the server. With zero ODP, HFC 227ea is absolutely safe for the environment too.

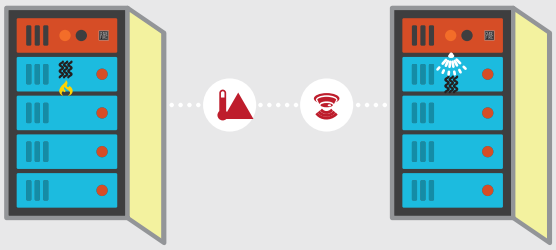
FIGHTS CLASS

A B C F

THE SERVER-READY CEASEFIRE SQRS



The Ceasefire SQRS is installed within the micro environment of a server rack. When the detectors sense a rise in temperature above normal, particles of smoke or a change in the air quality of the contained server space, they activate the system and discharge the extinguishing agent (HFC 227ea) and a hooter goes off, warning personnel about the fire.



80% of HFC 227ea's firefighting effectiveness is achieved through heat absorption and 20% through direct chemical means (action of the fluorine radical on the chain reaction of a flame).

The Ceasefire SQRS houses detectors, controls, extinguishing agent cylinders and alarm devices in one compact unit.
The modular nature of the system brings scalability together with the effectiveness of micro environment protection.

For high air flow server racks, the system comes with a Highly Sensitive Smoke Detection option. The optional IP Module allows the user to monitor the system's health online using a computer or a smart phone, and receive email alerts and alarms in case of emergencies.

Since each rack can hold an independent Ceasefire SQRS, it can be easily converted into a large system when more than one server rack needs to be protected.

Harnessing the latest in cutting-edge firefighting technology, this system has been specially designed for server racks in data centres and server rooms. It requires no monitoring and offers 24x7 protection by self-activating instantly in the event of a fire.

THE COMPLETE CEASEFIRE SQRS SYSTEM

The system comprises of various components coming together to create an unbeatable system for server racks.

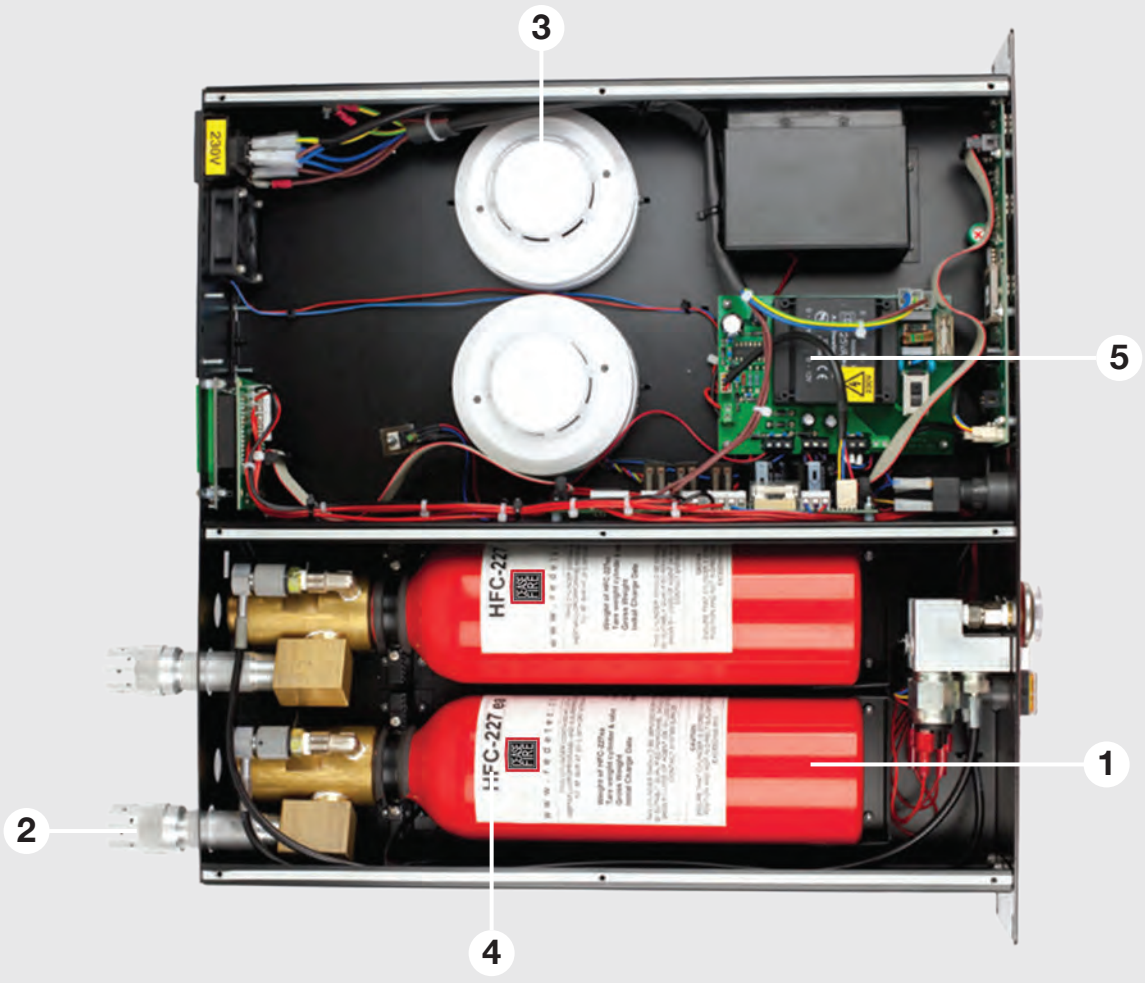
1. **Agent Tank:** An essential component of the system, these high pressure tanks are placed in the server rack. Depending upon the requirement, one or two containers are installed.

2. **Nozzles:** The extinguishing agent is dispersed through the brass discharge nozzle. These nozzles are designed specially for the server rack.

3. **Detection Devices:** Ceasefire uses accurate and reliable Point Type Detectors, built-in with the option of remote detection for further coverage. Highly Sensitive Smoke Detection (HSSD) is also available for mission critical applications.

4. **Extinguishing Agent:** The SQRS is powered by HFC 227ea, a gas that has zero Ozone Depletion Potential and is environmentally friendly.
The containers are each capable of protecting a volume of 1.5 m^3.

5. **Control:** The SQRS is designed to suit a range of applications, whether 19" rack mounted or otherwise. Each system is a complete fire detection and suppression solution, managed by an internal controller.



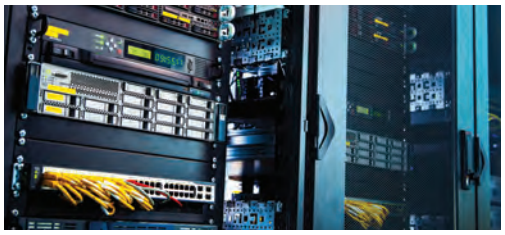
FEATURES

A,B,C,F	Fights Class A, B, C and Class F Fires
	Electronics Friendly
	Environmentally Friendly
	HFC 227ea Superior to Other Gas Agents
₹	High-value Risk Protection
	No Clean-up Required After Discharge
	24-hour Protection
	Multiple Triggers
	Speedy Deployment, Minimal Downtime
0:10	Highly Effective
	Residue-free
	Superior Quality
	Unobtrusive Design
	Highly Flexible

APPLICATION AREAS

Offices

Data Centre



Servers


ISOLATED
SILENCE
RESET
RELEASED
EXTRACT
ISOLATE
ENABLE
CONTROLS
NORMAL
EXTINGUISHANT
RELEASE
CEASE
FIRE
CAUTION - This cubicle is protected by an automatic fire suppression system. The system must be switched to "Isolated" when any work is carried out inside the cubicle. No hot work, smoking or soldering.

TECHNICAL SPECIFICATIONS

Specification	SQRS 1.5 Zp	SQRS 1.5 Za	SQRS 3.0 Zp	SQRS 3.0 Za
1.5 m^3 flooding capacity	✓	✓	✗	✗
3 m^3 flooding capacity	✗	✗	✓	✓
Fit server racks with a depth of 600 mm	✓	✓	✓	✓
Includes point type optical smoke detection	✓	✓	✓	✓
Includes a pressure gauge, allowing you to check the cylinder pressure	✓	✓	✓	✓
Has a low gas pressure output warning	✓	✓	✓	✓
Comes with external connection for fire control coverage of additional areas	✓	✓	✓	✓
Volt-free contact outputs for 1st and 2nd stage alarms and system fault conditions	✓	✓	✓	✓
Two pressure gauges to indicate pressure in each cylinder	✗	✗	✓	✓
Selectable single activation mode	✓	✓	✓	✓
Highly Sensitive Smoke Detection for high airflow applications	✗	✓	✗	✓
Also availble with optional IP Module	✗	✓	✗	✓

CF3000 - SELF CONTAINED WATERMIST-BASED HYDRANT SYSTEM

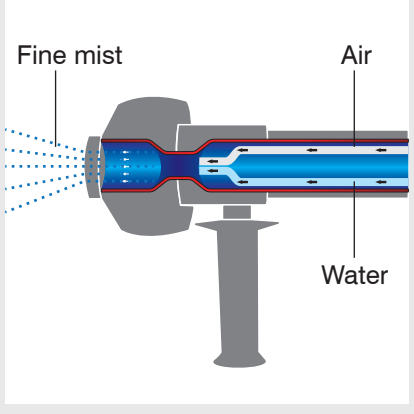
Never underestimate a fire. With enough oxygen and other fuels, even the smallest flame can turn into a full-scale blaze, destroying everything in its path in just six minutes. The problem is, even if firefighters are rushing to your aid, external factors such as traffic and construction could prevent them from reaching you in time.

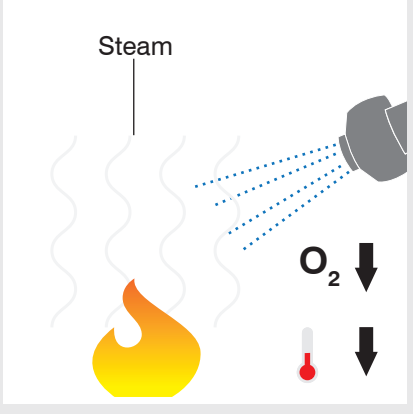
Which means that to beat a fire, you need two important things on your side: quick response time and powerful firefighting equipment that's easily accessible and on the premises.

Powered by revolutionary Watermist technology, CF 3000 maximises the firefighting and cooling properties of water, and then increases it manifold.

HOW WATERMIST WORKS.

Revolutionary technology breaks water down into a fine mist. This mist is then thrown at the fire with a great kinetic force, covering a large surface area. As soon as the mist comes into contact with the fire, it instantly turns into steam. Enveloping the flames, cutting down the oxygen supply and reducing the temperature to below combustion levels. Ensuring that even the largest fire succumbs to Watermist technology in minutes.



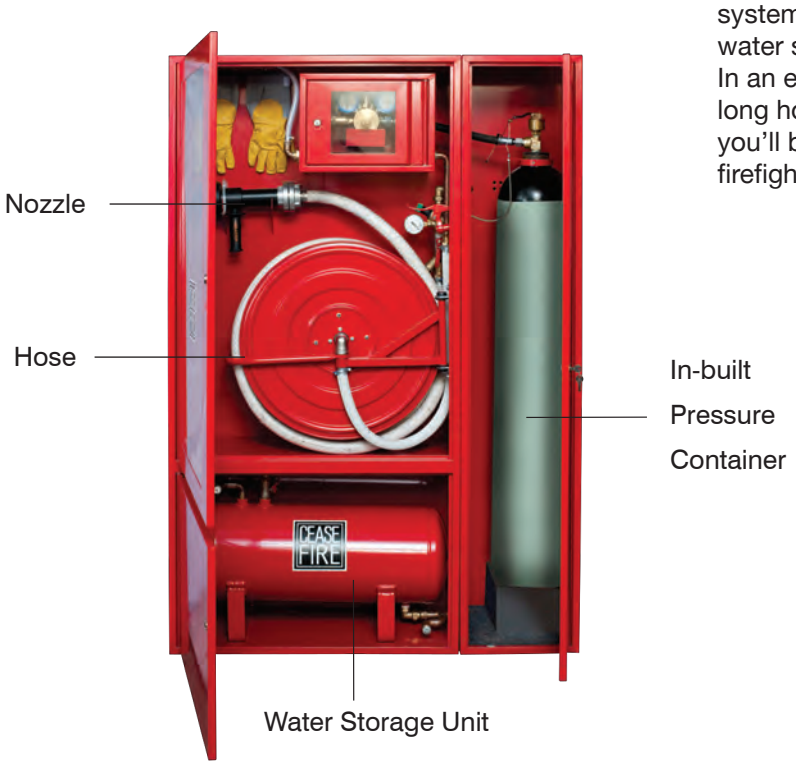


About CF 3000

These advanced standalone Watermist hydrant systems are highly dependable. Being standalone firefighters, you don't need to worry about issues like malfunctioning pipelines and wear and tear on parts that affect commercially available hydrants. What's more, while other hydrants run dry and other fire extinguishers are exhausted before putting out all the flames, CF 3000 continues the fight against fire.

Featuring the same potent firefighting power as conventional hydrants with much more efficient usage of water, CF 3000 use just 60 litres of water where a normal hydrant would needs thousands of gallons to achieve the same results.

CF 3000 is a self-contained, standalone firefighting device, suitable for locations with no ready supply of compressed air and water. This easy-to-use system features an in-built pressure container, water storage unit and an optional foam supply unit. In an emergency, all you need to do is pull out the long hose, activate the device and instantly, you'll be armed with CF 3000's immense firefighting power.



TECHNICAL SPECIFICATIONS:

Specification	CF3000
Overall Dimensions	1200 x 370 x 1800 mm
Total Weight of Cabinet and Device	300 kg
Length of Fire Hose	30 m
Nitrogen Gas Cylinder Capacity	68 l
Nitrogen Gas Pressure	300 bar
Water Tank Capacity	60 l
Continuous Operating Time	4 min

FEATURES:

	Effective use of water		Can be used on all classes of fires
	Smaller droplets to fight larger fires		Compatible with electronic equipment
	Thermal barrier		Independent of power supply

APPLICATION AREAS:

Garments Manufacturers

Malls

Furniture Industry

Theatres

Restaurants and Food Supply Chain

Factories

Power Plants and Thermal Power Stations

Assembly Lines

CEASEFIRE MINI

Anyone who's ever been in a fire situation agrees: fire is the biggest foe. Mercilessly ruining everything in its path; be it expensive electronics, mementos or human life. But even the biggest of fires start small, and in an overwhelming majority of cases, experts can trace their origins to tiny enclosed areas, like an electrical cabinet with old wiring or a fuse box.

The only solution is to catch the fire in its nascent stage by guarding these enclosed areas, so that it doesn't stand a chance of becoming big. Although advanced suppression systems that can detect and kill the fire exist in the market, they are not designed to protect microenvironments like electrical appliances, MCB (Miniature Circuit Breaker) panels or enclosed machinery.

What you need is an ultra-small suppression system that's unobtrusive and can take on a fire the moment it starts.

Hello, Mini!

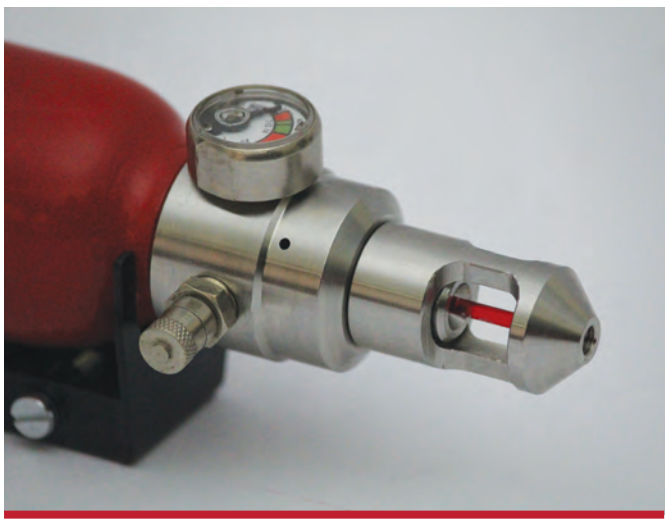
Introducing the Ceasefire Mini, the biggest, smallest suppression system in town; and proof that some of the best things do come in small packages.

The Mini is a state-of-the-art microenvironment suppression system designed by Ceasefire. The size of your palm, it sits snugly inside small enclosed spaces that are vulnerable to fire. When the temperature of the microenvironment exceeds a preset limit, the Mini swings into action and automatically extinguishes the fire. Place it inside your server. Pop it in the fuse box. The Mini fits anywhere, and protects everywhere!

The green Ceasefire Mini is available in clean agent HFC 227ea. This causes no collateral damage to your electronics or the Earth, making the Mini absolutely safe.

Types of Ceasefire Mini

Ceasefire has designed a Mini to protect practically every kind of microenvironment, including those that cannot be reached by humans.



Mini – Intuitive System
The Mini – Intuitive System is a direct suppression system which protects the microenvironment from inside. Place it inside or attach it to the inner wall of the microenvironment, and the Mini is ready to protect.

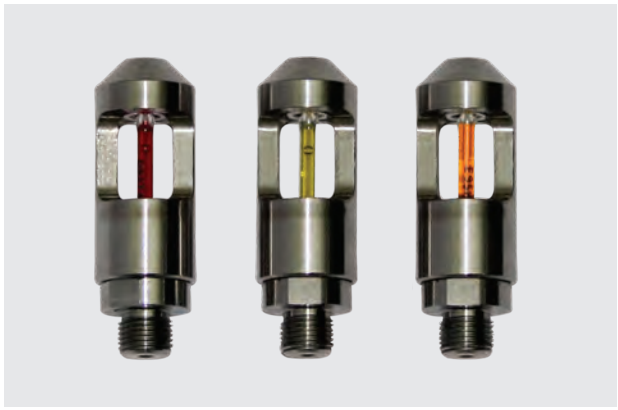
Mini – Adaptive System
The Mini – Adaptive System is an indirect suppression system designed for those microenvironments which are too small to even accommodate a Mini, let alone other firefighting systems. In this case, the Mini container is installed outside, with its heat-sensitive glass bulb inside the microenvironment.

Components of the Mini

HEAT-SENSITIVE GLASS BULB

The Mini's heat-sensitive glass bulb acts as the heat detector. In case the temperature inside the microenvironment rises beyond a preset level, the glass bulb breaks to activate the system. In the Intuitive System, the glass bulb is attached to the main container while in the Adaptive System, it is attached to a stainless steel barrel which extends from the container.
Ceasefire has designed 3 types of glass bulbs depending on the temperature conditions of the microenvironment to be protected:

- 57°C – Ideal for electrical cabinets in areas where the temperatures are low, like air-conditioned workplaces, hospitals, server rooms, etc.
- 63°C – Ideal for electrical cabinets where the temperature is moderate, like non-AC offices, factories, garages,etc.
- 93°C – Ideal for electrical cabinets where temperatures are high, like welding units, manufacturing setups.



STAINLESS STEEL CONTAINER

The Mini's container is a seamless piece of stainless steel that is corrosion resistant. Depending on the amount of extinuishing agent, there are five variants of the Mini container: 100g, 200g, 300g, 400g and 500g. A ball valve sits on top of the container. This ball valve is available in Intuitive and Adaptive variants.

STAINLESS STEEL BARREL

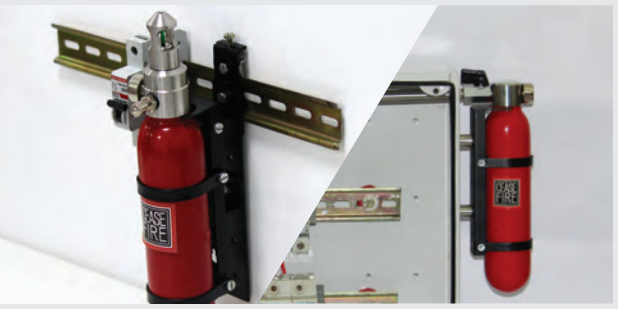
The Adaptive System has an option of attaching a stainless steel barrel between the glass bulb and the container to extend the Mini deep into unreachable spots. When the glass bulb breaks, the extinguishing agent passes through the barrel and out of the exit port of the nozzle.
The barrel is available in three sizes: 100mm, 150mm and 200mm.

PRESSURE GAUGE

The Mini's state-of-the-art pressure gauge tells you that the extinguishing agent is under optimum pressure and the Mini is in top working condition.

INSTALLATION MOUNTS

The Ceasefire Mini is attached to the wall of the microenvironment by means of mounts. There are two types of Mini mounts: Standard Installation Mount and Busbar Installation Mount.



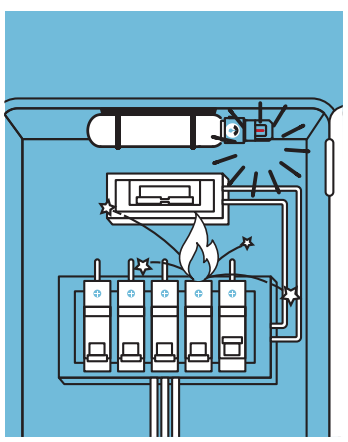
Features and benefits

✓	**Ease of Use:** Being automatic, the Mini requires no prompt to start firefighting.
⇄	**Fits Anywhere:** The Mini can easily fit into the spots that are most prone to fire.
▣	**Electronics-friendly:** The Mini is filled with clean agent HFC 227ea that causes no damage to your electronics.
⊘	**Maintenance-free:** The Mini comes with a 1 year warranty and the assurance of no leakage.
🔧	**Easy to Install with 2 Mounts:** The Standard and Busbar mounts make installation a breeze.
↻	**Self-actuation:** Since the Mini is self-actuated, it spots the fire and protects even when no one is around.
✳	**No Power Supply Required:** The Mini uses a mechanical release mechanism to start firefighting.
A,B,C	**Works on All Classes of Fire:** The Mini can be used on any kind of fire, making it a truly versatile firefighter.
🌡	**Different temperature settings:** Mini variants are available for 3 heat thresholds – 57°C, 63°C and 93°C.
✋	**Protects all Microenvironments:** Available as an Intuitive or Adaptive System, the Mini protects everywhere.
🌡	**Heat-sensitive Glass Bulb:** The Mini's glass bulb acts as a heat sensor that detects a rise in surrounding temperature.

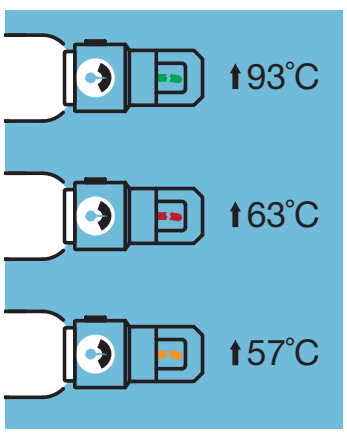
Technology meets design
In the handy Ceasefire Mini.

Built to protect microenvironments, the Ceasefire Mini automatically kicks into action in a fire situation.

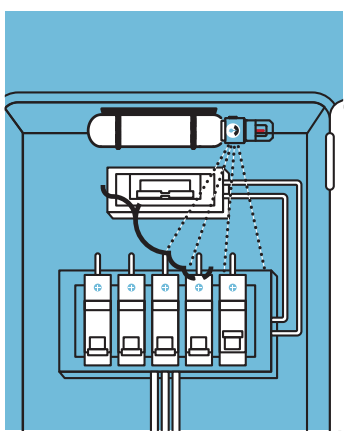
INTUITIVE SYSTEM



Stage 1:
A fire sparked by a short circuit causes the pressure inside the Mini's glass bulb to increase.

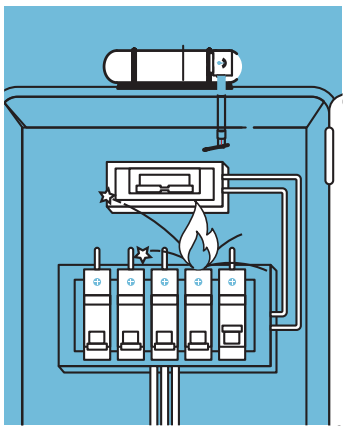


Stage 2:
The very second the temperature rises beyond a point, the bulb breaks and activates the system.

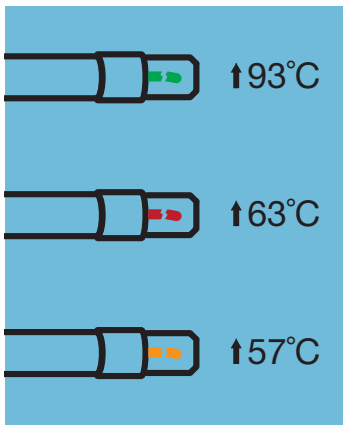


Stage 3:
Instantly, the extinguishing agent is dispersed, killing the fire in its early stages.

ADAPTIVE SYSTEM



Stage 1:
A fire sparked by a short circuit causes the pressure inside the Mini's glass bulb to increase.



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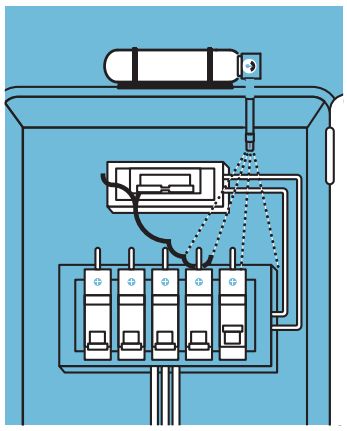
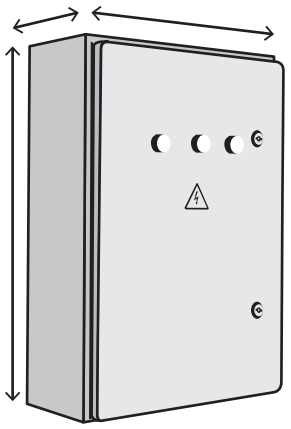


Stage 3:
Instantly, the extinguishing agent is dispersed, killing the fire in its early stages.

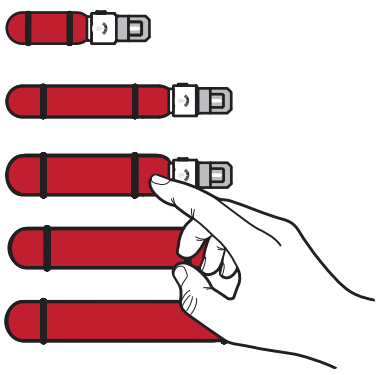
Zero Hassles

Fitting the Mini is as easy as 1-2-3. It's the only suppression system in the market which you can install without any help or technical support.

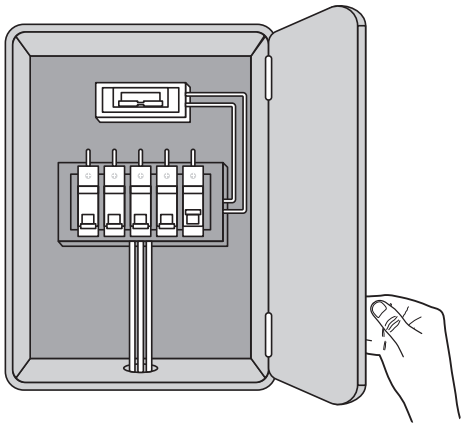
INSTALLING THE MINI - INTUITIVE SYSTEM



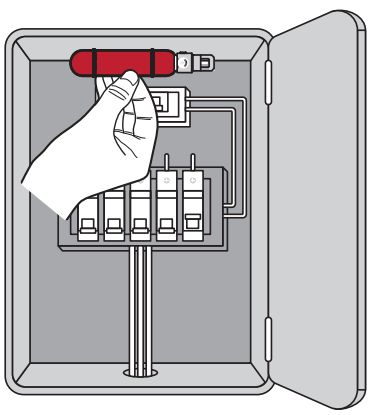
Step 1:
Measure the approximate volume of the enclosure you want to protect.



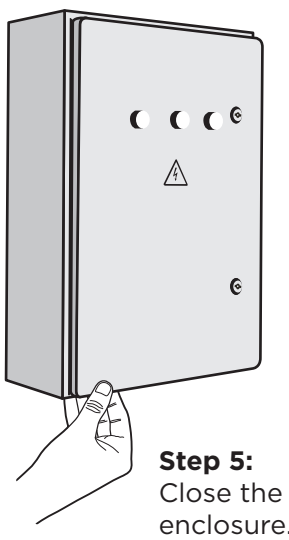
Step 2:
Choose the right variant of the Mini - Intuitive System.



Step 3:
Open your electrical cabinet, AHU or machinery.

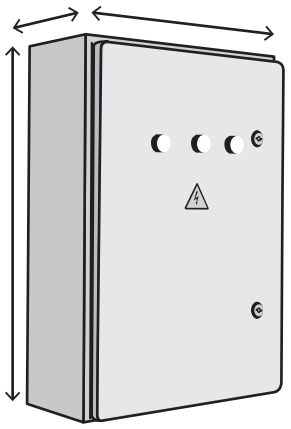


Step 4:
Place the Mini inside, vertically or horizontally.
In case of large enclosures, you could screw its bracket to the wall inside and place the Mini on it.



Step 5:
Close the enclosure.

INSTALLING THE MINI - ADAPTIVE SYSTEM



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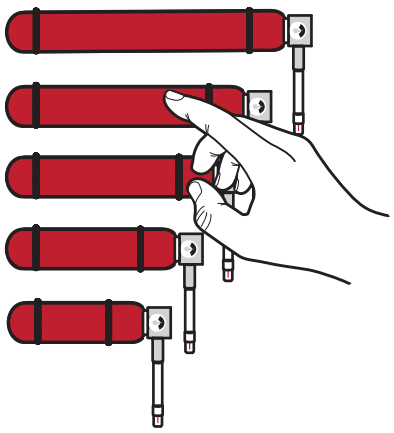
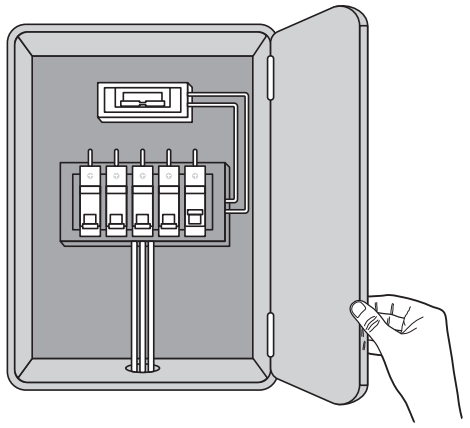
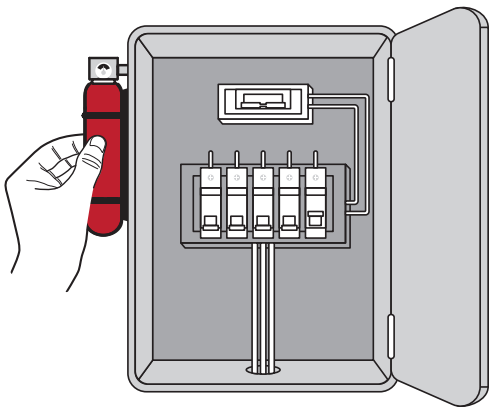


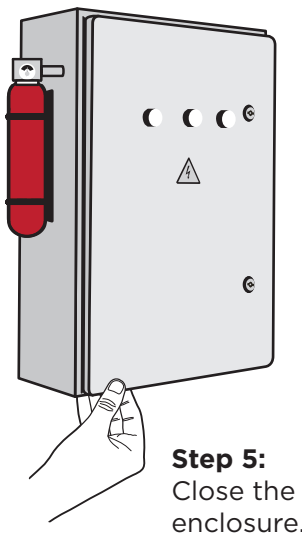
Step 2:
Choose the right variant of the Mini - Adaptive System.



Step 3:
Drill a hole in the wall of your electrical cabinet.



Step 4:
Place the Mini on the outside such that the barrel passes through the hole and the heat-sensing bulb is inside the cabinet.



Step 5:
Close the enclosure.

Application areas

The Mini is built to protect electrical cabinets of all kinds in homes, offices, factories, schools and hospitals.

Offices and Data Centres:

With several workstations and computers, some running round-the-clock, offices and data centres are at a high risk of fire. A Mini sitting unobtrusively inside the office's busy electrical cabinet can detect a fire and extinguish it before it destroys your workplace and data.
Besides, being powered by clean agent gas, it doesn't cause any discomfort and lets your staff continue working.

Homes:

Electrical cabinets and MCBs (Miniature Circuit Breakers) are blind spots in most houses, as the only time you look at them is when there is no power or when a switch trips. The Mini is built precisely for such an environment. Place it inside the cabinet and forget about it. Whether it's a short circuit or overheating, the Mini will take care of it.

Factories:

Old wiring. Irregular maintenance. A huge consumption of electricity. Electrical cabinets in factories are hotspots of fire, literally. Our tech team will help you determine how many Minis are required to protect the electrical cabinet in your factory so you can stop a fire before it ruins your business.

Schools:

Schools also consume a humungous amount of power, making their electrical cabinets high risk areas. Add to that the responsibility of managing thousands of students and suddenly, it has all the makings of a major mishap. This is why auto detection of fires is important. And nothing does it better than Minis placed in the electrical cabinets.

Hospitals:

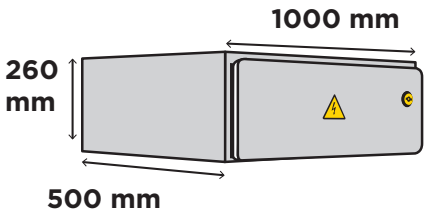
At any point of time, hundreds of patients undergo treatment in a hospital. There are complex scanning machines and labs to test these patients. Put together, all this leads to large power consumption. Minis cut the panic involved in a fire situation by automatically killing fires in the hospital's electrical cabinets.

Which mini variant should you choose?

If there is a microenvironment in need of protection, you can be sure there is a Mini for it. Depending on the volume of the space you're protecting, Ceasefire has designed 5 variants of the Mini. Here's how you can find the one most suited to your requirements.

MINI 100 GMS

Weight: **100 Gms**
Concentration: **9.5**
Volume in M³: **0.130**

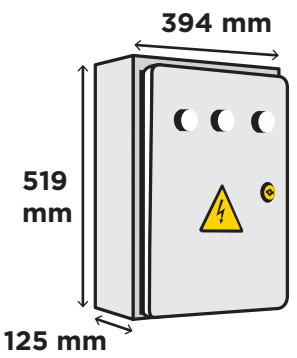


Suitable for sizes with volume <= 0.130 M³

Sample Size	Height in mm	Width in mm	Depth in mm
Type 1	**260**	**1000**	**500**
Type 2	**380**	**420**	**75**
Type 3	**380**	**450**	**75**
Type 4	**380**	**495**	**75**
Type 5	**380**	**740**	**75**

MINI 200 GMS

Weight: **200 Gms**
Concentration: **9.5**
Volume in M³: **0.261**

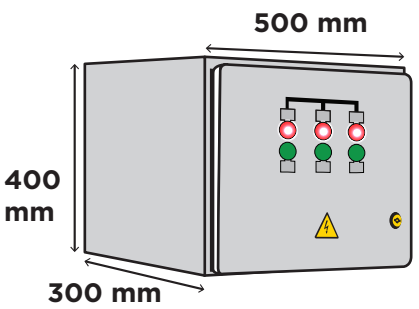


Suitable for sizes with volume <= 0.260 M³

Sample Size	Height in mm	Width in mm	Depth in mm
Type 1	**520**	**1000**	**500**
Type 2	**519**	**394**	**125**
Type 3	**519**	**430**	**125**
Type 4	**519**	**466**	**125**
Type 5	**519**	**538**	**125**

MINI 300 GMS

Weight: **300 Gms**
Concentration: **9.5**
Volume in M³: **0.392**



Suitable for sizes with volume <= 0.390 M³

Sample Size	Height in mm	Width in mm	Depth in mm
Type 1	**780**	**1000**	**500**
Type 2	**400**	**500**	**300**
Type 3	**450**	**500**	**300**
Type 4	**500**	**500**	**300**
Type 5	**550**	**500**	**300**

MINI 400 GMS

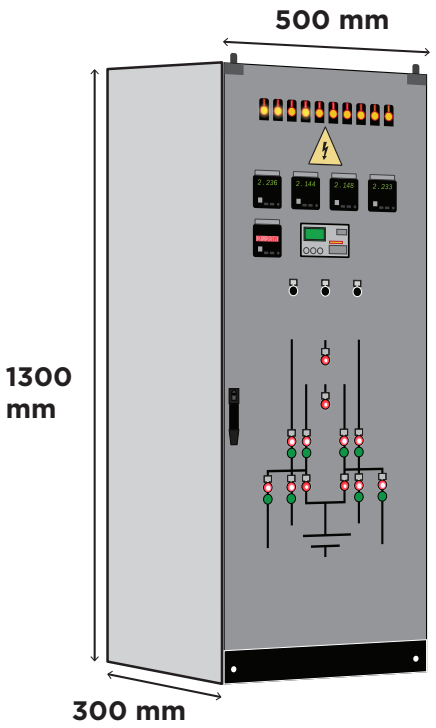
Weight: **400 Gms**
Concentration: **9.5**
Volume in M^3: **0.520**

Suitable for sizes with volume <= 0.520 M^3

Sample Size	Height in mm	Width in mm	Depth in mm
Type 1	**380**	**495**	**75**
Type 2	**519**	**466**	**125**
Type 3	**500**	**500**	**300**
Type 4	**700**	**500**	**300**
Type 5	**1250**	**500**	**300**

MINI 500 GMS

Weight: **500 Gms**
Concentration: **9.5**
Volume in M^3: **0.780**



Suitable for sizes with volume <= 0.780 M^3

Sample Size	Height in mm	Width in mm	Depth in mm
Type 1	**1560**	**1000**	**500**
Type 2	**1000**	**500**	**300**
Type 3	**1200**	**500**	**300**
Type 4	**1250**	**500**	**300**
Type 5	**1300**	**500**	**300**

LANCEPRO

The biggest challenge while fighting fires is common - to safeguard the lives of the people battling the flames. Often, when a fire breaks out in any large premises, the first line of responders to fight fire are at maximum risk. Even the best fire suits can only decrease the intensity of the fire, and not fully protect the firefighter.

The other big problem firefighters face in factories, hotels, hospitals and other large complexes, is the large number of enclosed rooms. This not only hides the flames from outside, but can also make the area inaccessible. The minute a firefighter opens a door or window in these spaces, there is a huge risk of of a backdraft - which could result in a massive explosion!

The only way out is to have a revolutionary firefighting system on your side. One that fights its way into sealed off spaces, battles the flames, and controls collateral damage at the same time.

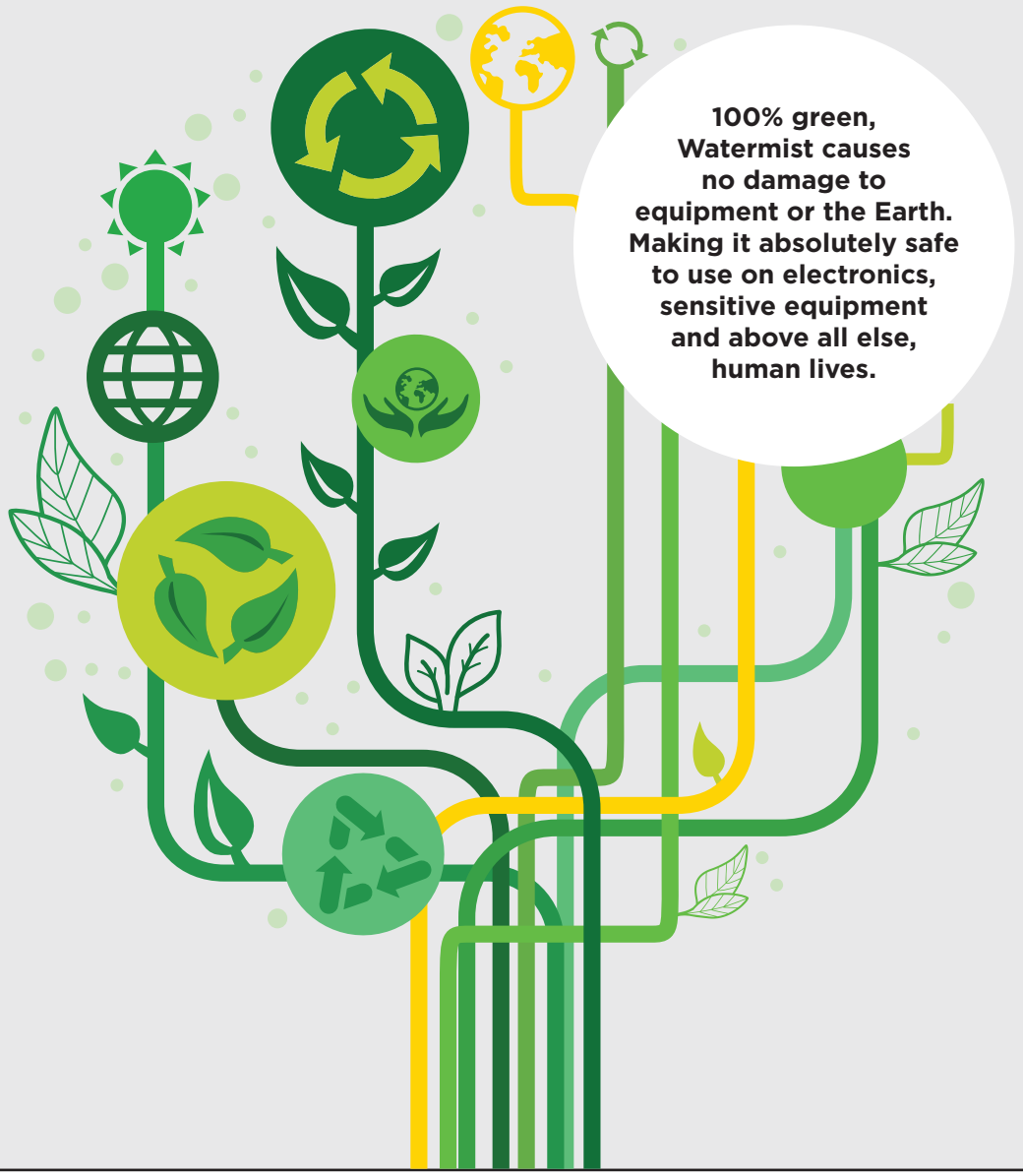
Considering some of these key challenges faced by firefighters, Ceasefire brings you the Ceasefire Lancepro. A revolutionary firefighting system that addresses some of the biggest challenges faced by anyone fighting a blaze.

REVOLUTIONARY TECHNOLOGY: WATERMIST

It's common knowledge that there is no extinguishing agent more potent than water.

With its massive cooling power of 2.6 MW per litre per second, water kills even the largest of fires in minutes. But even fire's worst adversary has its shortcomings. Using water on an electrically started blaze can be fatal mistake. What you need is cutting-edge technology that changes water's natural form, so that it can fight fires without causing any collateral damage.

The innovative Ceasefire Lancepro uses Watermist technology enabling it to be used safely on all types of fires including electrical fires. Watermist also increases the coverage area of water many times over, taking the firefighting power manifold by rapidly bringing down the temperature to below combustible levels and cutting off the oxygen supply.



100% green, Watermist causes no damage to equipment or the Earth. Making it absolutely safe to use on electronics, sensitive equipment and above all else, human lives.

ALL YOU NEED TO KNOW ABOUT LANCEPRO

The Lancepro allows the firefighter to fight the fire in an enclosed area without physically coming into contact with it.

A cordless rotary hammer drill, with a speed of 5000 blows per minute, in the system's kit allows the firefighter to drill a hole in the wall or ceiling of the enclosed area. Next, a nozzle attached to a long hose is pushed through. Allowing Watermist (droplets of 55-120 microns in size) to be launched at the flames from up to 9 metres away.

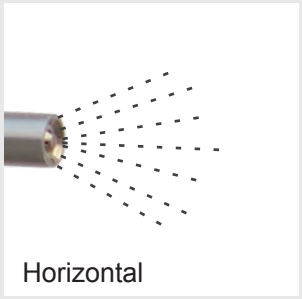
The Lancepro gun is available in two variants. Lancepro1 is used to horizontally penetrate through the enclosed area. Lancepro2 is used for vertical access.

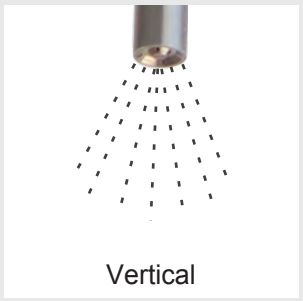
Both drills come with two bits – one for drilling through a concrete surface, and another for metal surfaces.

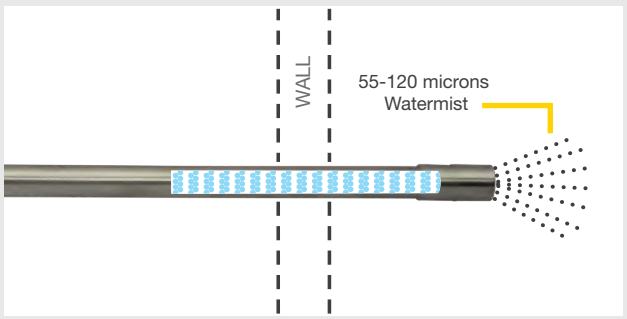
The Ceasefire Lancepro ensures zero risk of thermal shock or recoil while using, and is safe on any kind of fire. It can also be used fires in open spaces, allowing the firefighter to battle the flames from a distance.

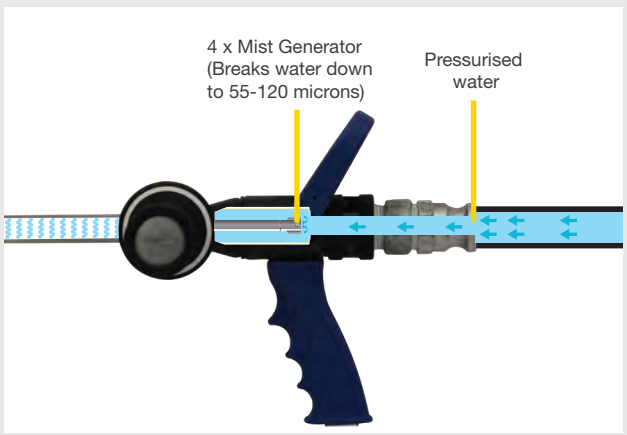
Powered by Watermist; the Lancepro offers four benefits. First, it secures the firefighter from the heat of the fire, and danger of entering the enclosed room.

Second, it cools the fire as a result of water evaporation. Third, forms a blanket over the flames, stopping the oxygen from reaching the flames
The fourth and biggest benefit is that it fights fires without any collateral damage to electronic equipment.









FEATURES

	Easy to use with Quick Activation
	Ensures Safety of the firefighter with remote access
	Two different variants to use as per requirement
A B C F	Fights Class A, B, C and Electrically started Fires

	Absolutely harmless on People
	Watermist ensures No Collateral damage
	Environment Friendly
	Ideal for Rapid Reaction

LANCEPRO SYSTEM:

Lancepro Gun

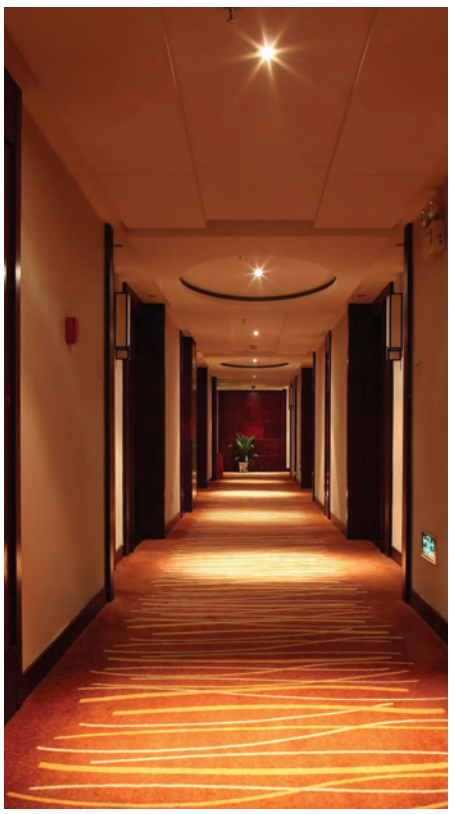
Hammer Drill Machine

Lancepro Kit

APPLICATION AREAS:

Garment stores
and Warehouses

Hospitals



Wooden godown, sheds
and furniture

Ammunition depots

Hotels

Paint factories

Factories

Large office, factories and
commercial buildings

Airports

Oil and fuel storage areas

TECHNICAL SPECIFICATIONS:

Technical Specifications	Watermist Lancepro 1	Watermist Lancepro 1
Type	Watermist Lancepro with nozzle, extension pipe, on/off lever and handle.	Watermist Lancepro with nozzle, extension pipe, on/off lever and handle.
Model number	Lancepro 1	Lancepro 2
Weight	1.7 kg	1.7 kg
Fluid handling	Clean water (water purity - Less than 400 microns)	Clean water (water purity - Less than 400 microns)
Total Length	67 cm (with an extension of 30 cm)	70 cm (with an extension of 30 cm)
Type of end connection	STORZ 25/instantaneous couplings to suit the system requirement.	STORZ 25/instantaneous couplings
Working Pressure	5 bar to 25 bar	5 bar to 25 bar
Mist droplet size Dv (microns)	55 – 120 microns	55 – 120 microns
Watermist discharge rate	40 LPM @ 5 bar	71 LPM @ 5 bar
Watermist stream range	82 LPM @ 25 bar	150 LPM @ 25 bar
Coverage diameter	4.5 m to 9.0 m	4.0 m to 7.5 m

TECHNICAL SPECIFICATIONS:

Technical Specifications	Drilling Kit (Drilling in metal, wood, gypsum board and plastic)
Type	TE 6-A cordless rotary hammer with Li-ion battery
Make	Hilti
Rated battery voltage / capacity	36V / 93.6 Wh
Speed under no load / underload (r.p.m.)	1050
Hammering speed, maximum (blows/min.)	5000
Weight with Hilti B36 2.6 Li battery	1.17 kg
Total tool weight (including battery weight)	3.8 kg

MORPH

Water storage tanks filled to the brim to combat fires. Fire hydrants on standby to take care of flames. Fire trucks ready to come to the rescue. While firefighting systems that use pressurised water to extinguish large fires are already in place, these systems use large amounts to try and douse the flames. Not only using water inefficiently, but also proving ineffective when it comes to fighting specific fires situations like oil and electrical fires.

Take a fire truck, for instance. The truck's small reservoir of water gets quickly depleted while firefighting. In a country like India where there's precious little water to begin with, the need of the hour is a system that minimises the use of water yet maximises firefighting potential. Especially in the case of large fires.

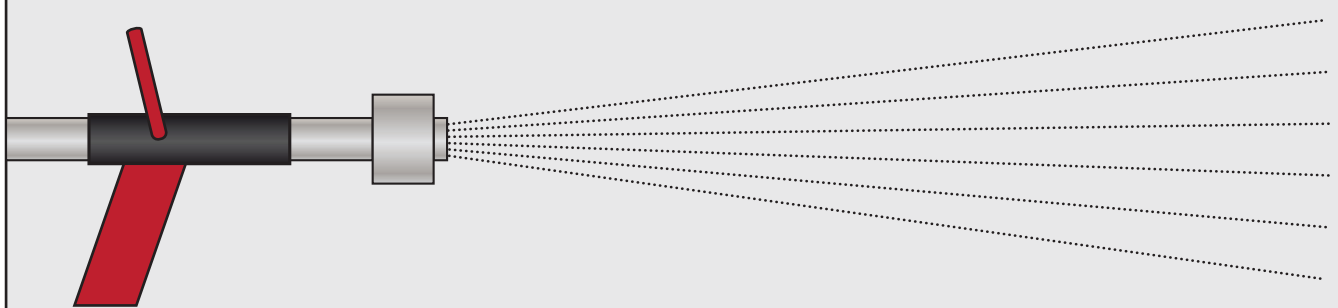
Presenting Ceasefire Morph. A range of advanced nozzle guns that, upon being attached to an existing hydrant system or fire truck, converts water into the revolutionary extinguishing agent, Watermist. Multiplying the power a fire truck or water hydrant has and allowing it to take on large fires with ease.

REVOLUTIONARY TECHNOLOGY: WATERMIST

It's common knowledge that there is no extinguishing agent more potent than water. With its massive cooling power of 2.6 MW per litre per second, water kills even the largest of fires in minutes. But even fire's worst adversary has its shortcomings. Using water on an electrically started blaze can be a fatal mistake. What you need is cutting-edge technology that changes water's natural form, so that it can fight fires without causing any collateral damage.

The revolutionary Ceasefire Morph converts water into Watermist, enabling it to be used safely on electrical fires. Watermist also increases the coverage area of water to fight fires many times over, taking the firefighting power of the fire engine or hydrant system many notches higher. Rapidly bringing down the temperature to below combustible levels, and cutting off the oxygen supply.

100% green, Watermist causes no damage to equipment or the earth. Making it absolutely safe to use on electronics, sensitive equipment and above all else, human lives.



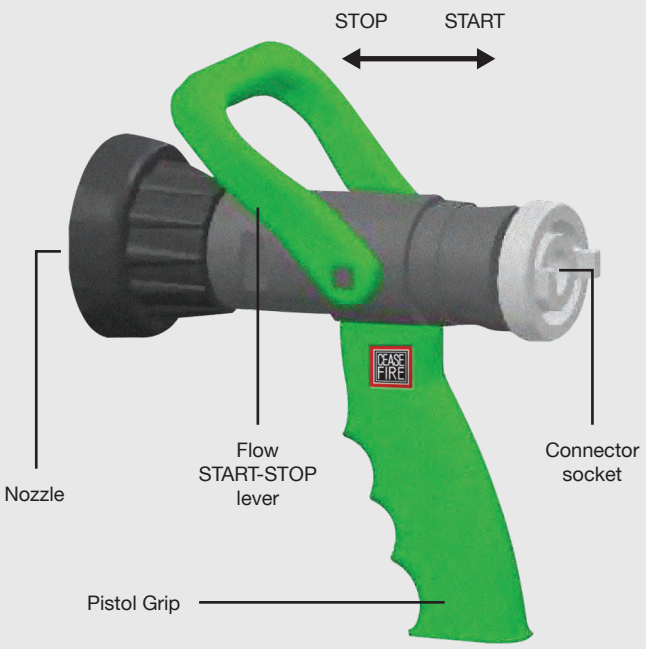
HOW IT WORKS

Ceasefire has designed three revolutionary Morph nozzle guns, each addressing different requirements and fire situations.

The Converter:
Designed to take on grass and bushfires, this nozzle dispenses Watermist with a wide throw.

The Transformer:
Lightning fast when it comes to fighting fires, this nozzle is ideal for use by firefighters on light, fast response fire trucks to extinguish class A, B, C and F fires, as well as electrical fires. This nozzle can also be used on storage tanks, converting them into Watermist hydrant systems.

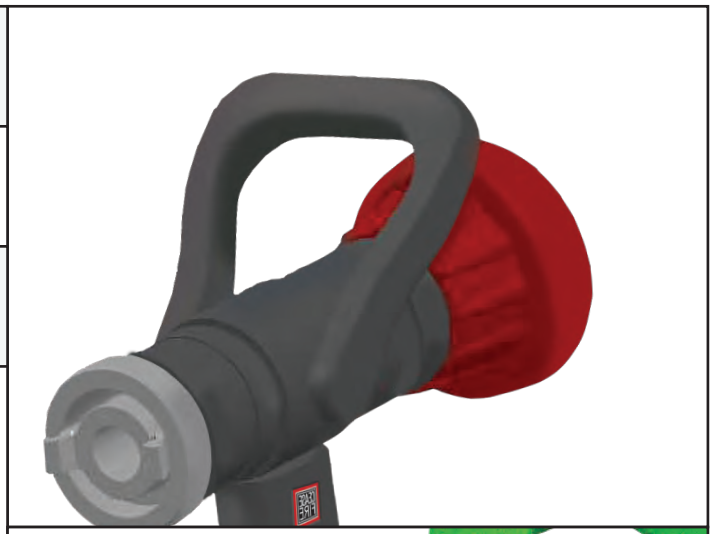
The Morpheus:
Designed to extinguish class A, B, C and F fires, as well as electrical fires, this nozzle is the real deal, offering Watermist at the most pressure, with the most throw and the most reach. It's a firefighter's best weapon.

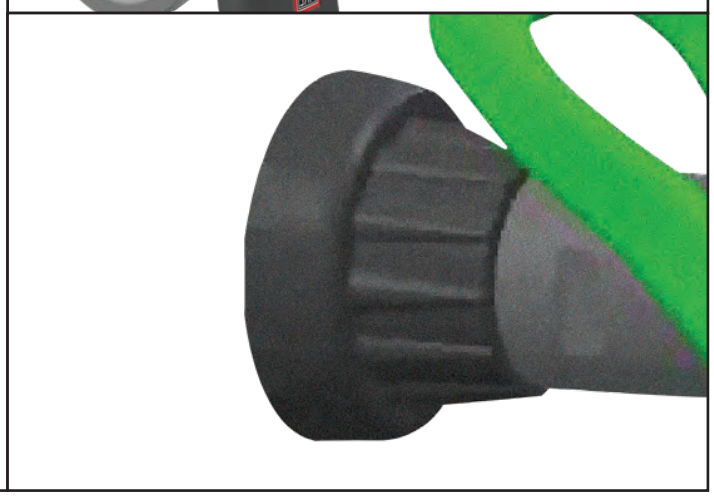



CEASE
FIRE

FEATURES:

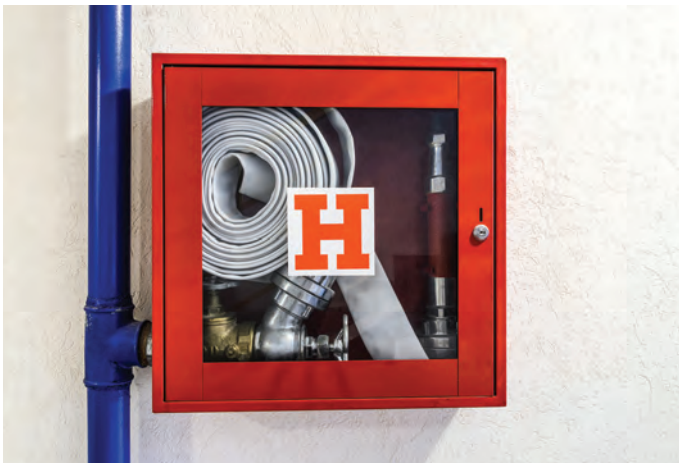
	Class A, B, C, F and Electrical Fires
	Range
	Customised Design





APPLICATION AREAS:

Designed to help firefighters take on the largest fires, the Morph upgrades an ordinary fire truck into a Watermist fire truck, increasing its firefighting power manifold. The Morph can also be attached to an existing water hydrant system in commercial and residential complexes to transform it into a Watermist system.



CEASE FIRE

WORLD SERIES

WHY CEASEFIRE:

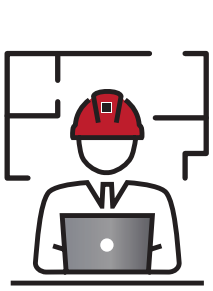
What gives Ceasefire's In-panel Tube-based Fire Suppression System an edge over other players in the industry?

DESIGN SUPPORT

Unlike extinguishers, Micro Environment Suppression Systems need to be specially designed and configured for the space they are installed in.

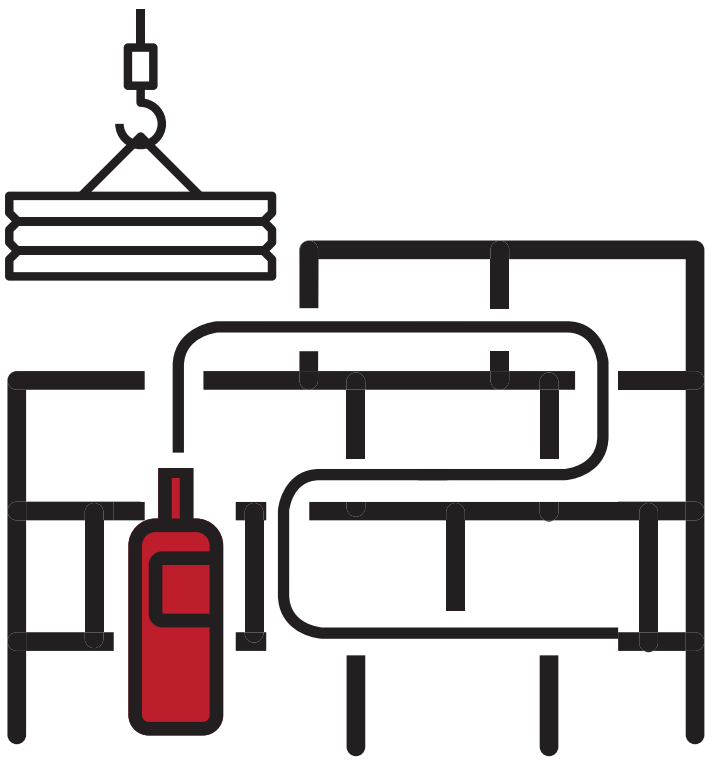
A wrongly designed system is practically guaranteed to be a faulty one.

At Ceasefire, we have a team of specialist engineers and draftsmen with expertise in designing In-panel Suppression Systems.



The design of the Micro Environment Suppression System is extremely comprehensive. CAD drawings are used to lay the sensor tube, and deploy pre-determined scientific methods to calculate the amount of extinguishing agent required.

The design not only configures the system specifically, but also lays down the details to be followed at the time of installation, in compliance with LPS 1666 standards.



THE SYSTEM'S CRITICAL COMPONENTS

There are six most critical components in an In-panel Tube Based Fire Suppression System for enclosed spaces that determine how it performs. These are:

- **The Extinguishing Agent Container**
- **The Valve**
- **Response Panel**
- **Extinguishing Agent**
- **Connectors**
- **Detection Tube**

In addition to the above components, other important aspects need to be considered before you make a purchase decision.

Service Support Network

Design Support

Certifications

THE CONTAINER BODY

The steel container has to be of a particular quality and thickness.

Why? Because it holds the extinguishing agent at high pressure.

The industry's practice of making containers is a highly compromised one. Many procure recycled containers from the local market, refurbish, and sell them. How can they guarantee the quality of the containers they haven't even manufactured themselves?

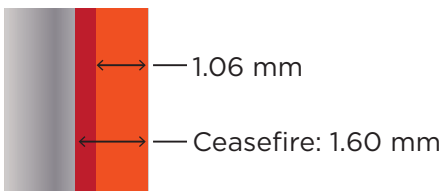
It's a question you need to ask yourself before making a purchase decision.

Ceasefire purchases steel directly from original and reputed producers - Tata Steel, Essar Steel or SAIL.

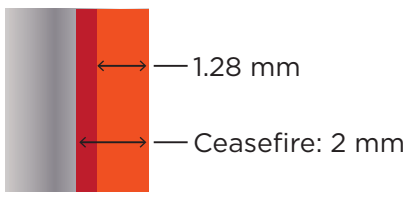
Our CRCA steel sheets are IS513 compliant, 34% thicker than the Indian industry average and 12.5% thicker than the European industry average.

Thickness required as per IS 15683:

2 kg extinguisher



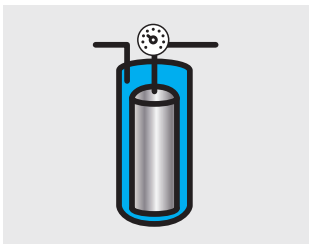
9 kg extinguisher



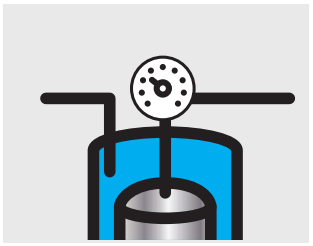
A specialised Deep Draw process is carried out to give the CRCA steel sheets the shape of a container. This process involves moulding through hydraulic presses.

After mechanically rolling the sheet to form a cylinder shape, the two ends are seamed together by advanced welding technology - Motorised Metal Inert Gas (MIG) CO_2 welding.

Creates the strongest and smoothest welded seam.



Ceasefire's production guidelines make it mandatory to conduct specialised Hydrostatic Pressure Testing on every single container.



A minimum of 30 kgf/cm2 pressure is exerted on the container for 2 mins. That's 3 times more pressure than a fire extinguisher, ensuring a perfect container.

Ceasefire containers undergo an Eight Tank Process for additional strength and durability.

THE VALVE

The valve is the most technical component of an extinguisher.

In such systems, it works on the principle of pressure differential, and directly corresponds with the detection tube and the discharge line.

It's vital that the many micro components that go making the valve are manufactured and assembled with absolute precision.

Production of valves require a highly specialised manufacturing set up. Many manufacturers, without this specialised production capability or know-how go ahead and manufacture this vital component. This often results in an output of substandard quality.

Our heavy duty valves are made of high-grade brass/ stainless steel, which have an integrated Ball Valve feature.

This ensures no leakages whatsoever!

The Open/ Close knob is designed in such a way that it cannot be accidentally closed.

A singular switch regulates the system's ports, which canonly be an accessed with an allen key can. Thus making it 100% safe against being turned off.

The status of the Open/Close knob can be electronically monitored by the Control Panel.

There are no intermediate moving mechanical parts for actuation other than pneumatic pressure itself.

Anyone who attempts to compare Ceasefire valves with those in the industry would instantly know that ours are almost 50% heavier and cohesively integrated.

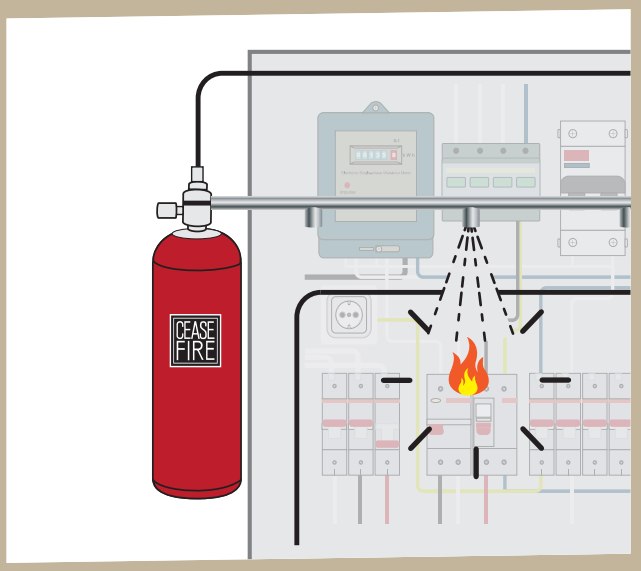
Ceasefire's valves are TPED certified and confirm to Pressurised Equipment Directorate (PED) Standards.

Hundreds of Ceasefire In-panel Tube-based Fire Suppression Systems are installed all over the country - in telecom towers, hospitals, schools, malls, airports and factories.

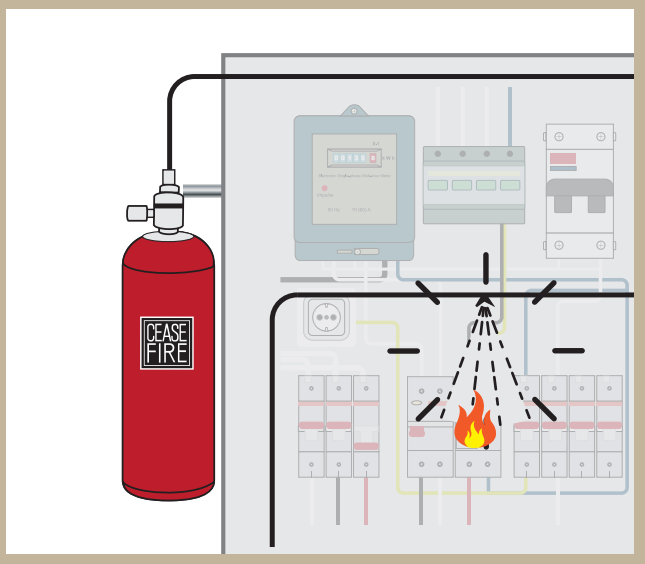
Not even a single valve malfunction incidence has been reported.

THE DETECTION TUBE

In an In-panel Tube-based Suppression System, fires are detected through the heat sensing tube.



In an Indirect version of the system, this tube detects the fire and burst, allowing the pressure inside to drop, signalling the valve to release the extinguishing agent through a separate discharge line.

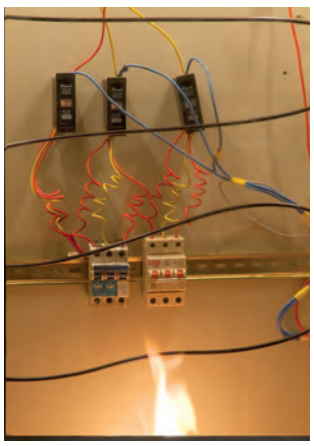


In a Direct version of the system, this tube both detects and activates the system by first allowing the pressure to drop, and creating a miniature nozzle for the extinguishing agent.

The tube needs to burst at the right temperature, or the system is rendered useless.

Our In-panel Tube Based Fire Suppression System, namely the CQRS, comes equipped with a Certified, High Grade Polyamide Multilayered Heat Sensing Tube with improved burst characteristics.

This ensures maximum safety and reliability.



Ceasefire's tubes offer robust detection and have distinct puncture characteristics, forming perfect discharge ports for firefighting.

✓UV protected for longer life

✓Fit for even the harshest of conditions

✓Multilayered hence far more durable and functional.

THE EXTINGUISHING AGENT GAS

A suppression system is designed for one singular purpose - to ensure that the extinguishing agent is discharged onto the fire at the right time, in the right manner.

The extinguishing agent is finally responsible for putting out the fire.

In-panel Tube-based Suppression Systems use a clean agent gas that fights the fire by totally flooding the enclosed space where the system is installed.

The clean agent gas must have near zero boiling point properties, to ensure complete vaporisation when discharged.

The Ceasefire In-panel Fire Suppression Systems use internationally certified HFC 236fa and HFC 227ea as the extinguishing agent.

HFC 236fa and HFC 227ea do not leave any kind of residue. UL/FM approved, they're non-corrosive in nature.

HFC 236fa and HFC 227ea are available through many reputed companies, and do not have any sourcing limitations.

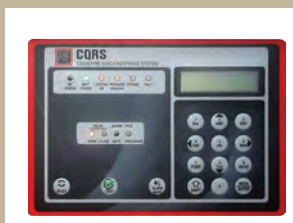
CONNECTORS

A Micro Environment Fire Suppression System is only capable of fighting a fire if it's pressurised. The pressure holding ability of the system is determined by the container, heat sensing tube, valve, and the connectors that join the tubes to the valve and container.

The connectors used in Ceasefire's In-panel Fire Suppression System (CQRS) meet the standards of the Superior Heat Sensing Tube installed in the system – ISO16750-3:2007.

The connectors installed in Ceasefire's systems meet the highest tightness and pressure holding capacity. The Heat Sensing Tube and connectors are designed to complete the detection and activation line seamlessly, and hold and maintain the pressure over a long period of time.

CONTROL PANEL



An In-panel Fire Suppression System is a mechanical, pressurised system that is activated on the principle of pressure differential.

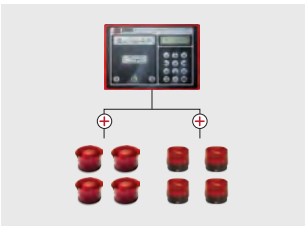
Such systems need to be electronically monitored to ensure they're ready to come to the rescue.

In larger premises with scaled up systems, it's even more essential to have the system in working order.

Can monitor up to four cylinder systems.

Ceasefire's In-panel Fire Suppression System comes equipped with a state-of-the-art Control Panel with the ability to monitor up to four cylinder systems.

Plus the provision to monitor the status of each of these four systems' Valve and Pressure Switches.

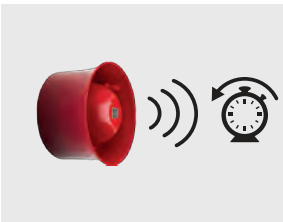


Ceasefire's Control Panels come equipped with a special relay output that enables the user to install additional Hooters (sound alarms) and Lamp Flashers (visual indicators) on the Detection Line.

They can be installed near the system anywhere depending on the requirements of the premise or the user.

Ceasefire's Control Panels have an in built 24-hour battery back up and a user-friendly LCD display.

The LCD display spells out the problem in case of activation, in addition to the sounder and flasher raising the alarm.



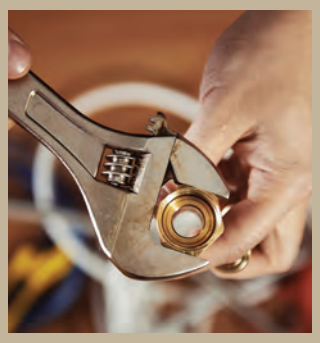
The Panel can be programmed to delay the sounder and relay activation by up to 5 seconds – allowing for minor incidents to be controlled manually before the system kicks into action.

INSTALLATION SUPPORT

One of the most important steps towards ensuring that your system is functioning perfectly, is to make sure that it is installed properly. Even the best designed system with the best quality components can fail if the system is not installed correctly. In short, your system is only as good as the installation.

At Ceasefire, we have a team of trained technical support professionals to install the In-Panel Fire Suppression System. The installation, overlooked by our engineers, meets every standard and guideline set.

SERVICE NETWORK AND SUPPORT



A high-end specialised system requires specialised service support.

These systems are complicated, and if the manufacturer of the system cannot provide service support at that location, it can lead to much confusion.

Spread across more than 300 Indian towns and cities.

At Ceasefire, we have a direct, nationwide delivery and service network spread across more than 300 Indian towns and cities.

Ceasefire has a dedicated team of specially trained engineers and technicians, with experience in installing and servicing these systems.

CERTIFICATIONS & APPROVALS

In addition to the above components, these important aspects need to be considered too.

An In-panel Fire Suppression System is a highly specialised system, often installed in high-risk areas or where the potential of collateral damage is extremely high.

It's therefore essential for such systems to be manufactured to benchmark quality standards, and installed to pre-defined norms set by specialised, reputed agencies.

These systems have successfully passed the most stringent test criteria laid out by the British certification agency under the category of micro environment suppression.

Which means not one or two components, but the system as a whole is fully certified.

The Ceasefire In-panel Systems have the British LPCB certification - for standard No. LPS 1666 for 2 kg and 4 kg HFC 227ea and HFC 236fa gas size variants.

Download the Ceasefire app.

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