



WHY

CEASEFIRE?



TRUST



QUALITY



RELIABILITY



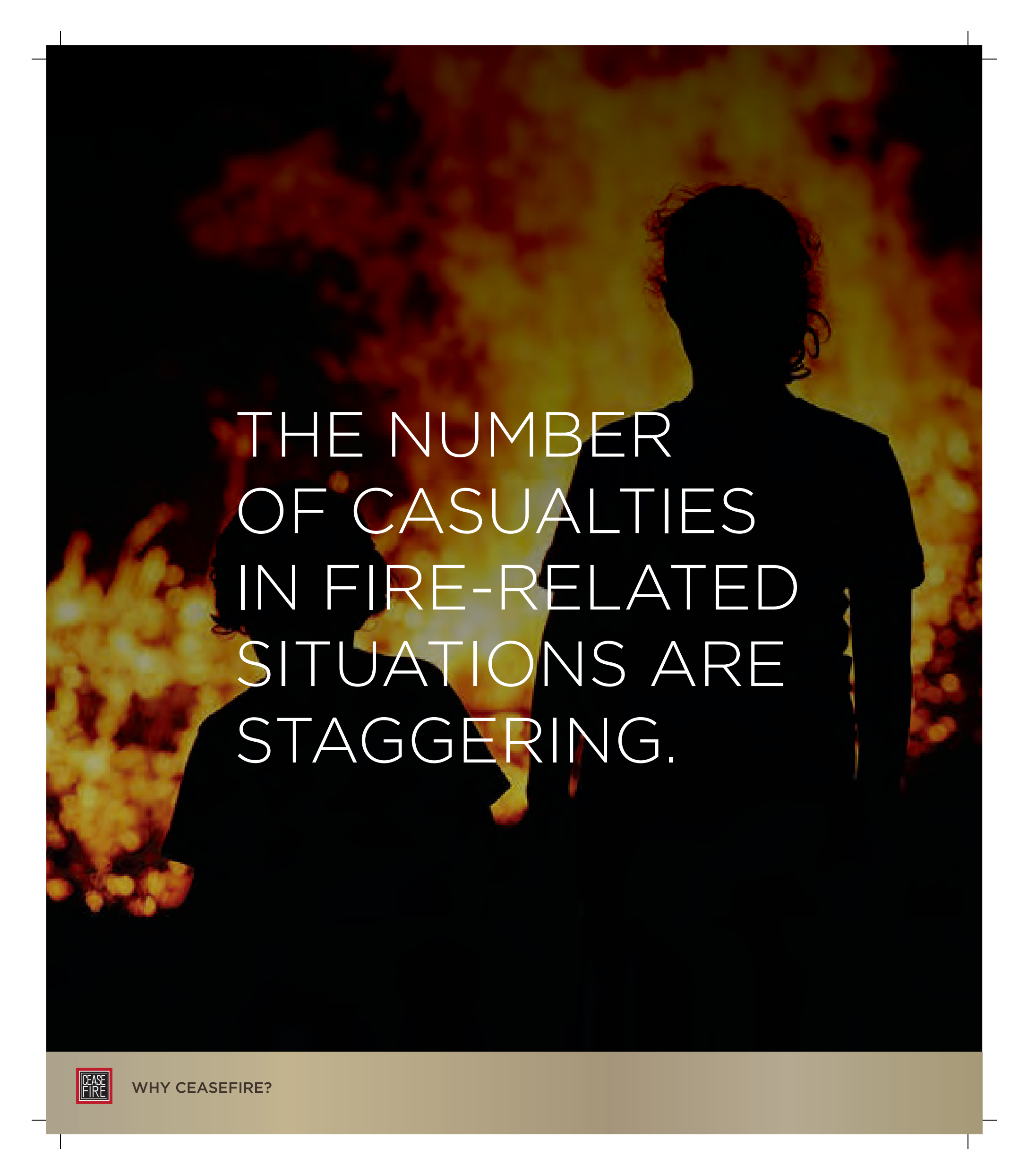
GLOBAL CERTIFICATIONS



STATE-OF-THE-ART
TECHNOLOGY



**CEASEFIRE IN-PANEL TUBE BASED
FIRE SUPPRESSION SYSTEM**

The background of the entire page is a photograph of a fire. In the foreground, the dark silhouettes of two people are visible. One person is standing and facing away from the camera, looking towards the fire. The other person is crouching or sitting in front of them. The fire is bright orange and yellow, with a lot of smoke and flame detail.

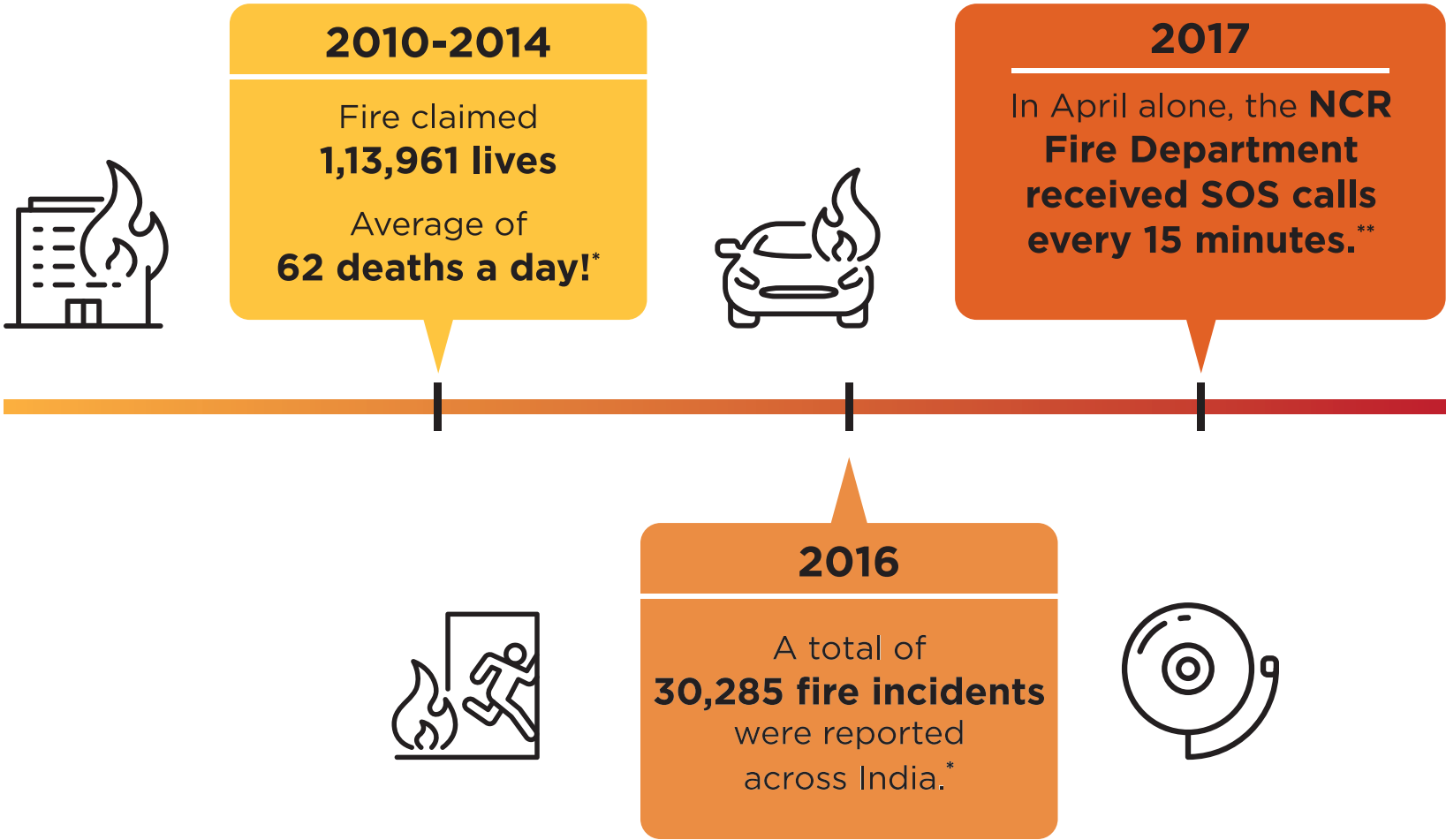
THE NUMBER
OF CASUALTIES
IN FIRE-RELATED
SITUATIONS ARE
STAGGERING.



WHY CEASEFIRE?

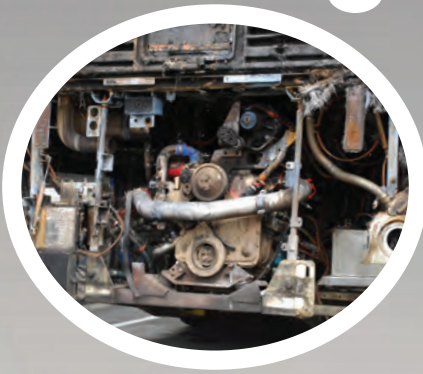


Fire is the cause behind **thousands of unnatural deaths** in the country.

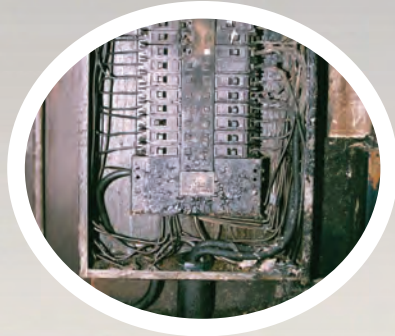


*Source: NCRB **Source: Times of India 18th April

Investing in fire safety = **Selecting the right technology to buy** + **Selecting the right agent to protect lives and property**



The very fact that you are considering a **Specialised Micro Environment Fire Suppression System** explains your seriousness and **commitment to the fire safety of your premise.**



WHY CEASEFIRE?

We're sure that you're making this investment to:

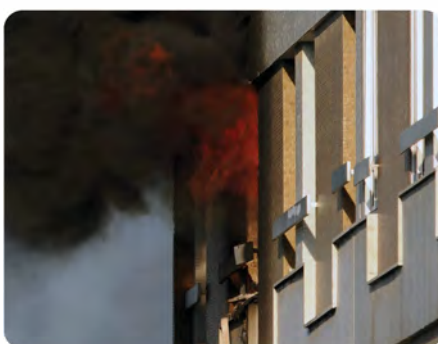


Enhance the firefighting capabilities of your premise



And **not merely to comply to some fire safety laws.**

But whatever may be the case, there are some things that you need to keep in mind:



- ✓ There are certain areas in a premise which are highly vulnerable to catching fire and often are the usual culprits behind big fires.
- ✓ They need to be protected by specialised microenvironment fire suppression systems.
- ✓ Installation of the suppression system is key to fighting the fire, if it's not installed correctly, the fire cannot be fully extinguished.
- ✓ It's vital that this system works in an emergency.
- ✓ Fire gives you no second chance, so there's no scope for error.

WHAT MAKES THE CEASEFIRE IN-PANEL TUBE BASED FIRE SUPPRESSION SYSTEM PERFORM EFFECTIVELY?



WHY CEASEFIRE?

**The only way to be sure that your system is the best for the job,
is to make sure it has:**



DESIGN & CUSTOMISATION SUPPORT



SYSTEM'S CRITICAL COMPONENTS



INSTALLATION SUPPORT



SERVICE NETWORK AND SUPPORT



CERTIFICATIONS & APPROVALS

DESIGN SUPPORT



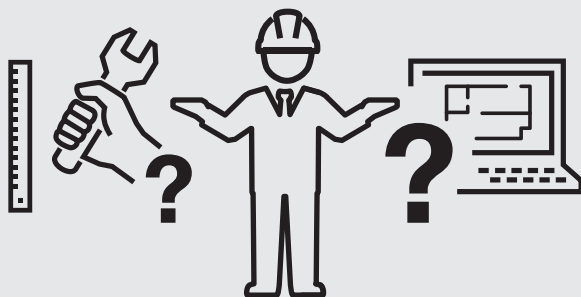
Unlike extinguishers, **Micro Environment Suppression Systems** need to be specially designed and configured for the space it needs to be installed at.

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



WHY CEASEFIRE?

Industry Practice



Most manufacturers do not pay heed to the design aspect of these systems.

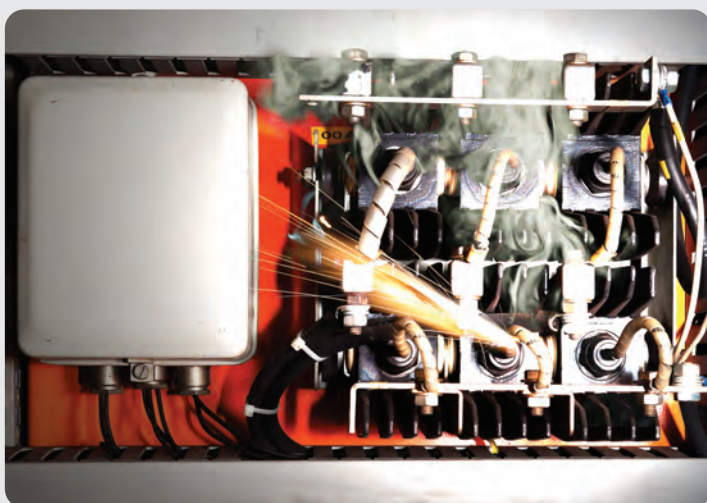
Ceasefire Practice



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

Industry Practice

The general approach is **‘one design works for all’** and ‘what works for one premise will work for others’. **This assumption is extremely dangerous, resulting in malfunctions at the time of need.**



Ceasefire Practice

Using **CAD drawings to lay the sensor tube**, and deploying pre-determined **scientific methods to calculate the requirement** of extinguishing agent for the volume that needs protection. The design of the micro environment suppression system is extremely comprehensive.



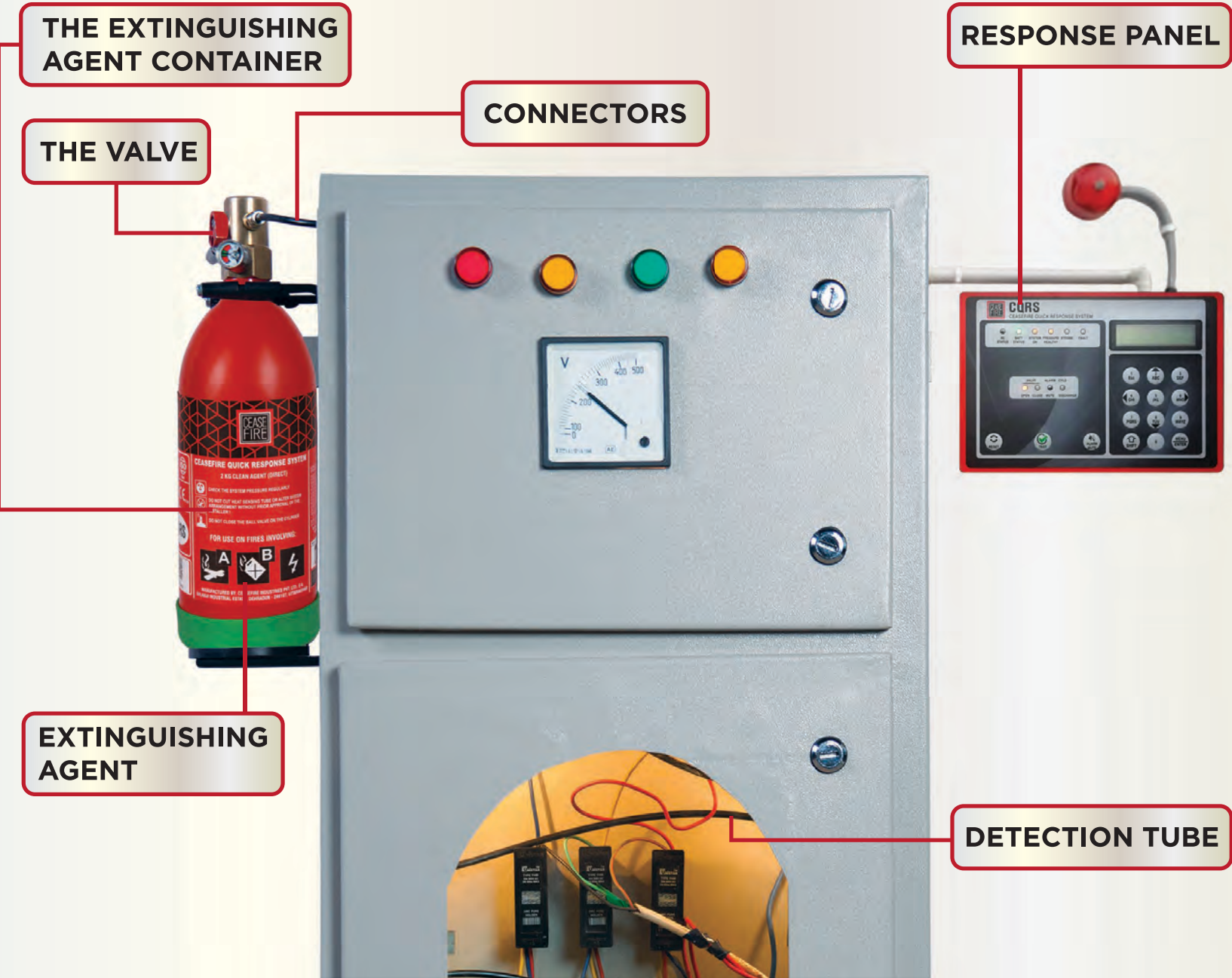
One that **not only configures the system specifically, but also lays down the details to be followed at the time of installation, to comply with LPS 1666 standards.**

WHAT MAKES AN IN-PANEL TUBE BASED FIRE SUPPRESSION SYSTEM PERFORM EFFECTIVELY?



WHY CEASEFIRE?

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:



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



SERVICE SUPPORT NETWORK



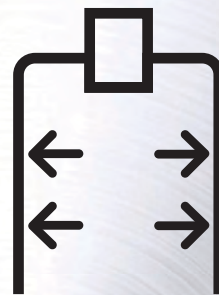
DESIGN SUPPORT



CERTIFICATIONS

THE CONTAINER BODY

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



WHY CEASEFIRE?

Industry Practice

Steel

Many manufacturers buy steel from steel scrap dealers.



Others buy recycled steel at auctions.



Ceasefire Practice

Steel

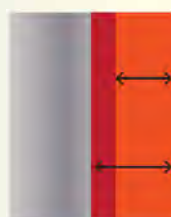
Ceasefire purchases steel directly from original and reputed producers - **Tata Steel, Essar Steel or SAIL.**



Our CRCA steel sheets are IS513 compliant and **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**



1.06 mm

Ceasefire: 1.60mm

**9 kg
extinguisher**

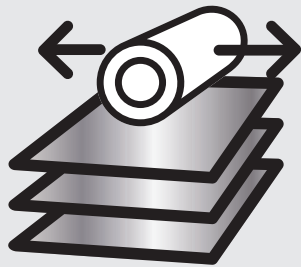


1.28mm

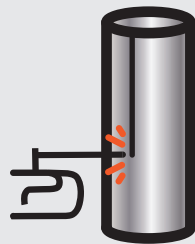
Ceasefire: 2mm

Industry Practice

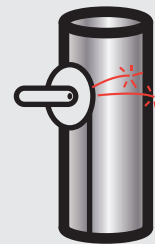
Manufacturing Process



Container bodies are made by rolling flat steel sheets



Then welding them with a long vertical joint



The weld is sanded to make it look seamless



Leading to abrasion and further weakening the joint.

Manufacturers who do use the Deep Draw process often don't have the right infrastructure, resulting in inferior quality

Ceasefire Practice

Manufacturing Process



A specialised **Deep Draw process** is carried out to give the CRCA steel sheets the shape 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) CO₂ welding.



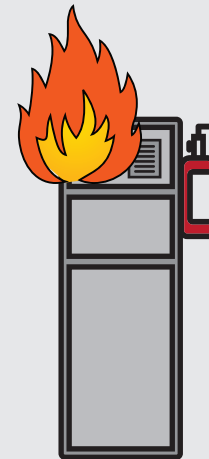
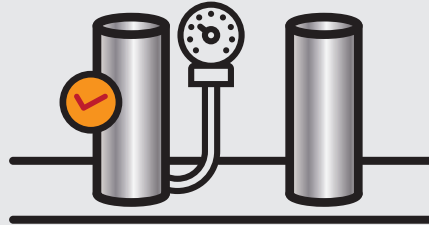
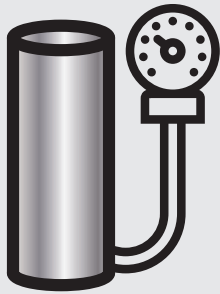
Creates the strongest, smoothest welded seam join .



WHY CEASEFIRE?

Industry Practice

Hydrostatic Pressure Testing



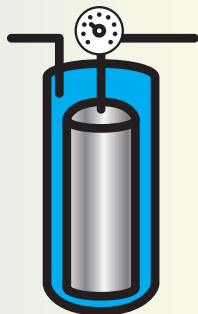
Unless pressured, an extinguisher will not work. **Many players do not test the container's pressure** holding capacity.

Others don't test every single container.

Result: In a fire situation, your extinguisher might not work!

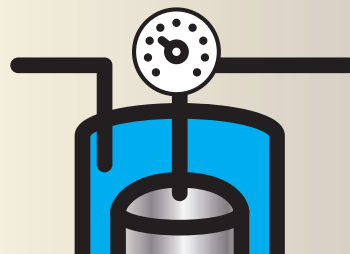
Ceasefire Practice

Hydrostatic Pressure Testing



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

30 kgf/cm²



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 tech embedded component** in 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 having such a specialised production capability or know how, go ahead and manufacturer this vital component. Output is often of substandard quality.



WHY CEASEFIRE?

Industry Practice

Most in-panel systems available come **fitted with external ball valves which have an Open/Close switch placed openly in the system.** Anyone can accidentally close the valve during cleaning or maintenance, switching the full system off position without anyone else realising it.



Ceasefire Practice

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 and **only with an allen key can it be accessed.** Thus **making it 100% safe** against being turned off.

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



Industry Practice

International regulatory guidelines make it **mandatory** for any valve that operates with pressurized containers **to obtain a special certification from the Transport Equipment Directorate (TPED)** for safety and reliability.

The majority of fire suppression systems available in the market are not certified.



Ceasefire Practice



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.



WHY CEASEFIRE?

Industry Practice

The largest complaint from people using industry products is about the **leakage of the pressurising gas from the valves.**



Ceasefire Practice

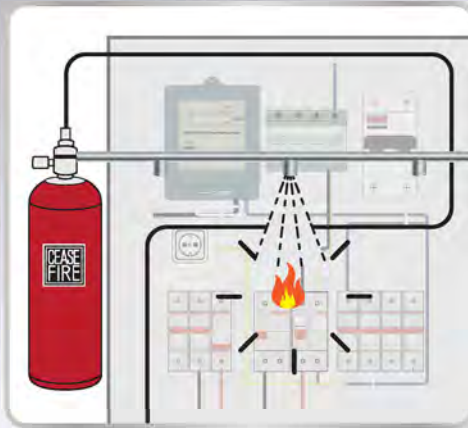


Hundreds of Ceasefire In-Panel Tube Based Fire Suppression Systems are **installed all over the country - in telecom towers, hospitals, schools, malls, airports and factories.**

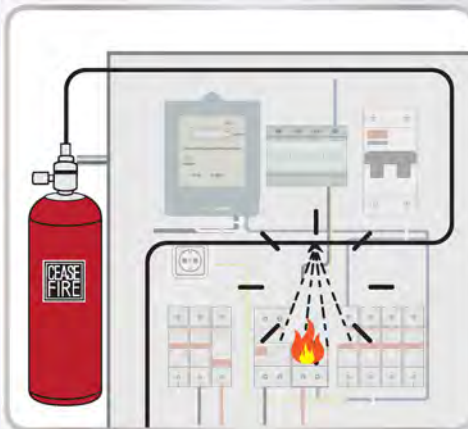
Not even a single valve malfunction incidence has been reported.

THE DETECTION TUBE

In an In-Panel Tube Based Fire 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 the tube 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 in the tube and creating a miniature nozzle for the extinguishing agent.

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



WHY CEASEFIRE?

Industry Practice

The industry **standards on detection tubes is highly compromised.**



Many manufacturers procure tubes from the pneumatic industry, that have **never been tested or certified against fire.**

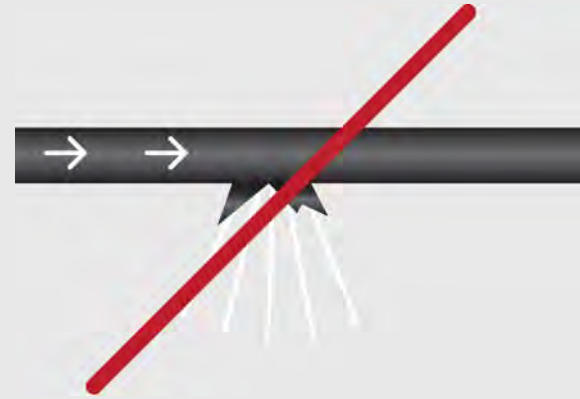
Ceasefire Practice

Our In-Panel Tube Based Fire Suppression System, namely the Ceasefire Quick Response System (CQRS), comes equipped with a **Certified, High Grade Polyamide Multilayered Heat Sensing Tube with improved burst characteristics.** This ensures maximum safety and reliability.



Industry Practice

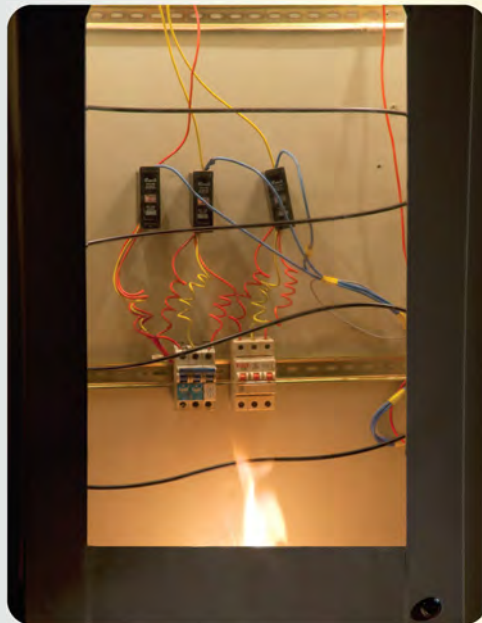
Compromised tubes **neither burst at the right temperature or puncture correctly** to create the right discharge port for the extinguishing agent.



Ceasefire Practice

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

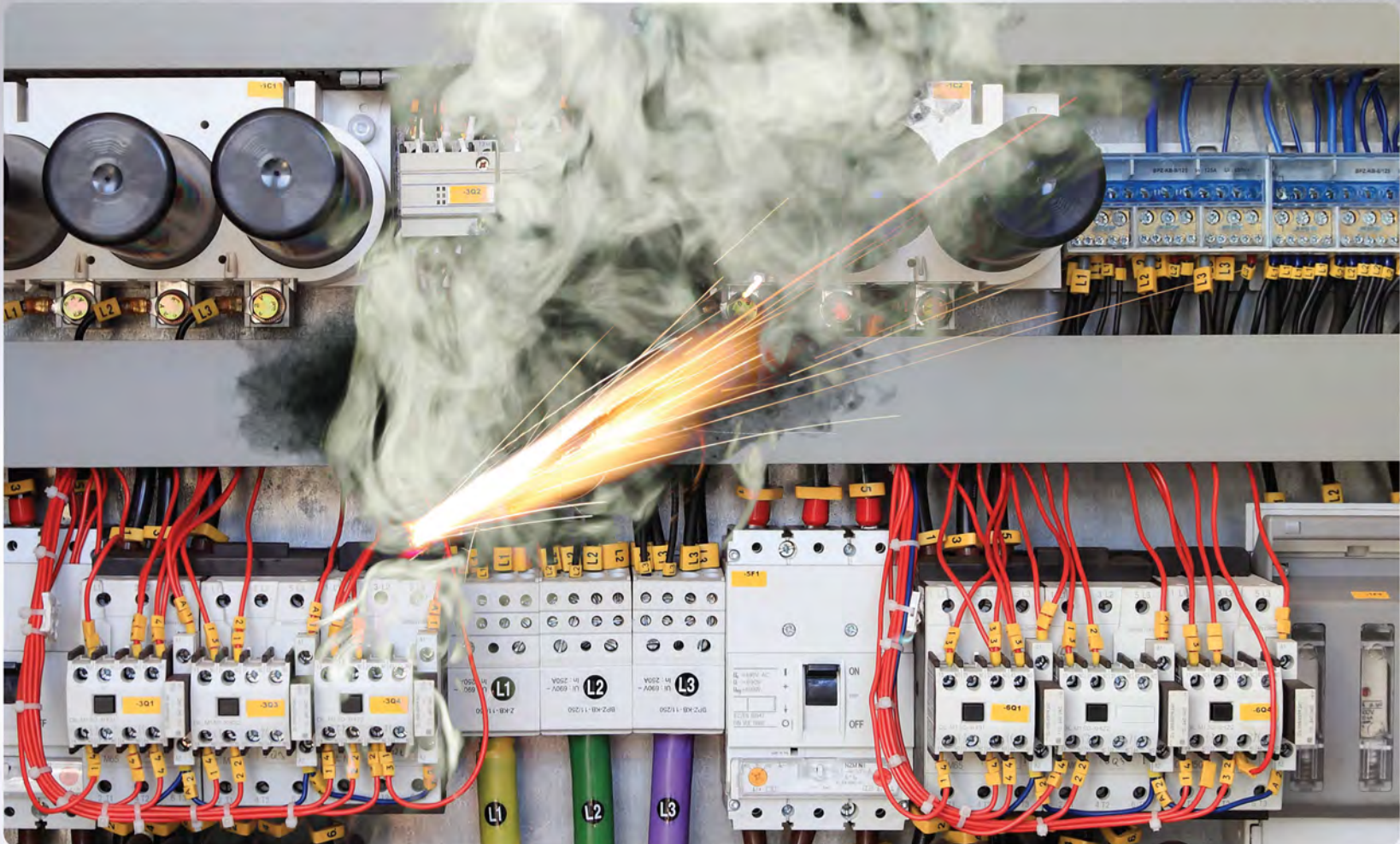
- ✓ UV Protected for longer life
- ✓ Fit for even the harshest of conditions
- ✓ Multilayered, hence far more durable and functional.



WHY CEASEFIRE?



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.**

It's the extinguishing agent that's finally responsible to put out the fire.

In-Panel Tube Based Fire 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.



WHY CEASEFIRE?

Industry Practice



The **majority** of systems available in the market **use Fluroketones or any other refrigerant gases as the extinguishing agent**. Due to a high boiling point of 49°C, there's a **high probability of a liquid discharge during activation**.

Ceasefire Practice



The Ceasefire In-Panel Tube Based Fire Suppression Systems use internationally certified **HFC 236fa and HFC 227ea gases as the extinguishing agent**.

Industry Practice

The unused Fluroketones leaves **propionic acid as a residue which is corrosive and harmful**.

Ceasefire Practice

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

Industry Practice

Fluroketones are available through very limited sources.

Ceasefire Practice

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

CONNECTORS

A microenvironment 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 connect the tubes to the valve and container.**



WHY CEASEFIRE?

Industry Practice



Most manufacturers use connectors and fittings from the pneumatic industry that do not have or follow any standard specifications. Considered inconspicuous components, **they're sourced from the open market.**

Ceasefire Practice



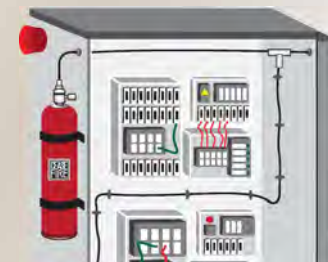
The connectors used in Ceasefire's In-Panel Tube Based Fire Suppression System (CQRS) **meet the standards of the Superior Heat Sensing Tube installed in the system – ISO16750-3:2007.**

Industry Practice



The **industry fails to recognise that connectors can make or break a pressurised system.** Leakage of gas from a **substandard connector makes the system dysfunctional**, despite all the care that may have been given to the other components.

Ceasefire Practice



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 Tube Based 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.**

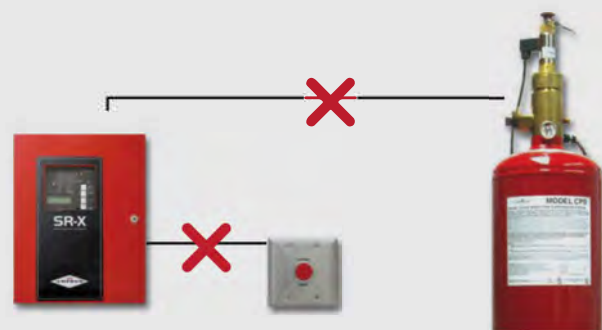


WHY CEASEFIRE?

Industry Practice



The Control Panel in **most systems available in the marketplace are basic**, with a rather **basic level of monitoring**.

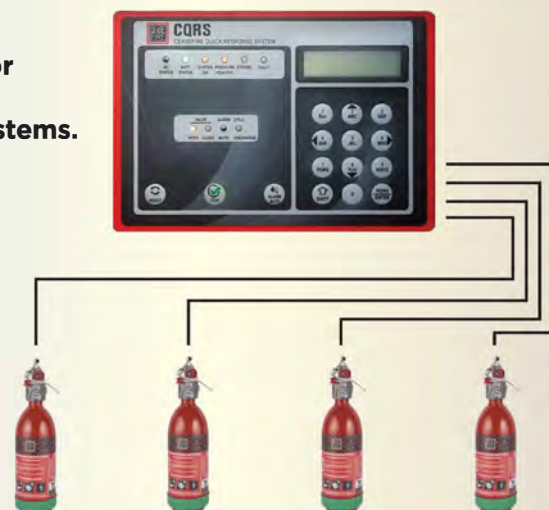


Their features include **general visual indications**

No option to program and monitor the status of vital components like the Valve and the Pressure Gauge cum Switch.

Ceasefire Practice

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 Gauge cum Switch.**

Industry Practice



Basic Control Panels do not have any special relays to deploy additional alarms in the system to meet the requirement of a larger premise.

Ceasefire Practice



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.**



WHY CEASEFIRE?

Industry Practice



These basic Control Panels do not come with any battery back-up.

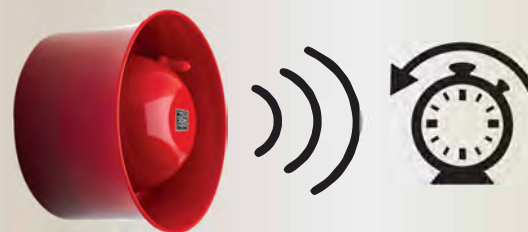
Ceasefire Practice



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 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.**



WHY CEASEFIRE?

Industry Practice



Only a few players give importance to design and installation, but they don't have trained, experienced installation technicians on their side. The result: **A well designed product that might not work in a fire situation.**

Ceasefire Practice

At Ceasefire, we have a team of **trained technical support professionals to install the In-Panel Tube Based Fire Suppression System.**

The installation, overlooked by our engineers, meets every standard and guideline set.



SERVICE NETWORK AND SUPPORT



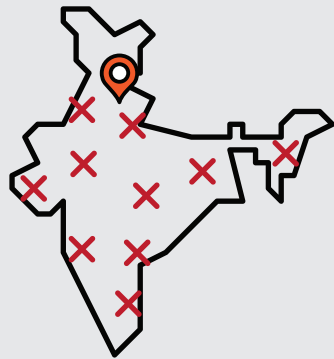
A high-end specialised system requires specialised service support.

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



WHY CEASEFIRE?

Industry Practice



Most manufacturers are **either based out of one metro**, or on the outside have a presence in a few metros. **They don't have the capability to service their products at far off locations.**

Ceasefire Practice



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.**

Industry Practice



Most manufacturers don't have dedicated technicians trained to handle such systems and service them.

Ceasefire Practice



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

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

CERTIFICATIONS & APPROVALS

An In-Panel Tube Based 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 predefined norms** set by specialised, reputed agencies.



WHY CEASEFIRE?

Industry Practice



It's a **common industry practice to mislead and confuse customers** when it comes to the name of certifications.

Many players sell systems **not certified by competent agencies**, others have **certification for simply one component**, yet claim to offer fully certified systems.

Ceasefire Practice



The Ceasefire In-Panel Tube Based Fire 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.

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

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



WHY SHOULD YOU CHOOSE A CEASEFIRE IN-PANEL TUBE BASED FIRE SUPPRESSION SYSTEM



WHY CEASEFIRE?

1. Ceasefire's In-Panel Tube Based Fire Suppression Systems are **designed, manufactured and installed with precision and expertise**; keeping the **unique requirements of the space** in which these systems are to be installed in mind.



2. The container of Ceasefire's extinguishers are **stronger and sturdier**, and designed to stay **pressurised throughout the life of the product**.

Steel sheet thickness:



34% more than
Indian standards

12.5% more than
European standard.

Deep draw process



Advanced Motorised
Welding Technology



Chemical treatment



Specialised powder
coating process



- ✓ Made from steel **procured from original source steel producers like TATA Steel, Essar Steel or SAIL.**
- ✓ The **thickness of the steel** sheets used is **34% heavier than the Indian industry standards (IS15683), and 12.5% heavier than the European standard.**
- ✓ **Containers made through the Deep Draw process - with 70% less seams.**
- ✓ **MIG CO₂ welding** over weaker conventional welding techniques.
- ✓ **Each container is Hydrostatic Pressure Tested.**
- ✓ **Every container is chemically treated - internally and externally - for durability and endurance.**
- ✓ Ceasefire's containers are also internally **coated with epoxy powder to guard against corrosion.**
- ✓ Containers are **painted using a specialised powder coat process.** The paint finish is beyond compare - even in comparison to the world's biggest fire extinguisher manufacturers.

3. The system's valves are heavy duty, made of high-grade brass and with an Integrated Ball Valve.



Electronically monitored through the control panel.

- ✓ This feature **ensures against no leakages what-so-ever.**
- ✓ The **Open/Close switch in the valves** is designed so that **no one can accidentally switch off the system.** Making it **100% safe against someone accidentally turning off of the system.** In addition, the **valve's status can be electronically monitored through the Control Panel.**
- ✓ Meeting regulatory guidelines for pressurized containers, **Ceasefire's valves are certified TPED for safety and reliability.**

4. The system comes **equipped with a certified, high-grade Polyamide Multilayered Heat Sensing Tube** with improved burst characteristics. This ensures maximum safety and reliability.

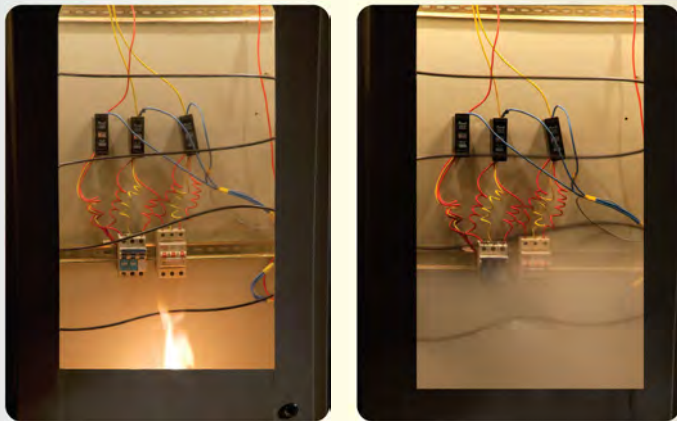


- ✓ This Heat Sensing Tube is **UV protected for longer life, and can withstand the influence of other mediums like fluids.**
- ✓ This UV protection property makes it **fit for systems installed even in harshest conditions.**
- ✓ Offers robust detection with **distinct puncture characteristics to form a perfect discharge port for the extinguishing agent.**
- ✓ It's **far more durable and functionally superior** than those in systems manufactured by other players.



WHY CEASEFIRE?

5. Ceasefire's systems use HFC 236fa and HFC 227ea gases as the extinguishing agent.



Suppresses fire without any residue.

- ✓ Both clean agent gasses with a sub-zero boiling point, **ensure no liquid discharge during activation.**
- ✓ Both gasses are **UL/FM approved and non-corrosive in nature.**
- ✓ **HFC 236fa and HFC 227ea gases do not leave any kind of residue.**
- ✓ The gasses are **available through many reputed, supplying companies**, without any sourcing limitations – **unlike Fluroketones used by the industry.**

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

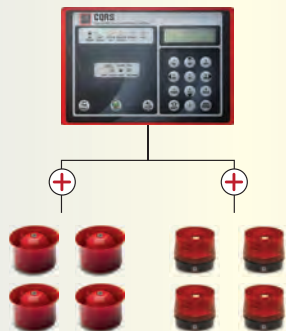
- ✓ The connectors **meet the highest tightness and pressure holding capacity standards.**
- ✓ The Heat Sensing Tube and Connectors are **designed to complete the detection and activation line seamlessly**
- ✓ **The connectors hold and maintain the pressure for a long period of time.**



7. Ceasefire's In-panel Fire Suppression System comes with a **state-of-the-art Control Panel.**



Can monitor up to four cylinder systems.



Enables the user to install additional Hooters and Lamp Flashers



24 hour battery backup



Spells out the problem

- ✓ The panel has the **ability to monitor up to four cylinder systems**, with the **provision to monitor the status of each of these four systems' Valve and Pressure Switches.**
- ✓ Equipped with a special relay output that **enables the user to install additional Hooter (sound alarm) and Lamp Flasher (visual indicator) on the Detection Line.**
- ✓ The **Hooters and Flashers can be installed near the system, and go off in case of a fire, raising the alarm.**
- ✓ Has an **in built 24-hour battery back up** and a **user-friendly LCD display that spells out the problem in case of activation.**
- ✓ **Can be programmed to delay the timing of sounder and relay activation up to 5 seconds** - allowing for minor incidents to be controlled manually before the system kicks into action.



8. The Ceasefire In-Panel Tube Based Fire Suppression Systems have the British LPCB certification.

- ✓ The Systems have **LPCB certifications** for standard **No. LPS 1666** - for 2 kg and 4 kg HFC 227ea and HFC 236fa gas size variants.
- ✓ These systems have **successfully passed the most stringent test criteria laid out by the British certification agency** under the category of microenvironment suppression.
- ✓ Not just one or two components, but the **system as a whole is fully certified**.



9. At Ceasefire, we have a team of specialist engineers and draftsmen with expertise in designing In-Panel Tube Based Fire Suppression Systems.

- ✓ **Using CAD drawings to lay the sensor tube**, and deploying pre-determined scientific methods to **calculate the requirement of extinguishing agent for the area that needs protection**
- ✓ Their **design** of the microenvironment Suppression System **is extremely comprehensive**.
- ✓ It not only configures the system specifically, but **also lays down the details to be followed at the time of installation**, to comply with LPS 1666 standards.



CAD drawings to lay the tube



Lay down the details for installation

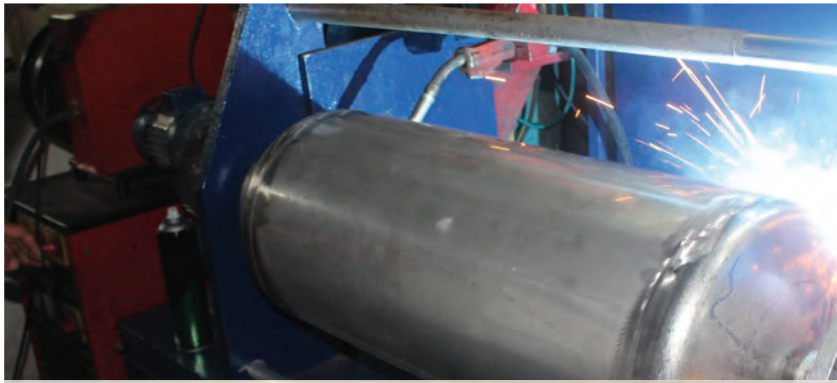
10. At Ceasefire, we have a direct, nationwide delivery and service network spread across more than 300 Indian towns and cities. Our dedicated team of specially trained engineers and technicians are experienced in installing and servicing these systems.



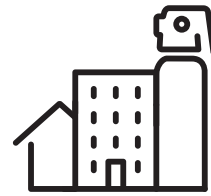
CEASEFIRE TO THE RESCUE



WHY CEASEFIRE?



For over 25 years, Ceasefire has manufactured, tested and sold hundreds of thousands of extinguishers, without a single case of malfunction.



A Ceasefire product is sold

every
61
seconds



Ceasefire saves a life

every
5
minutes



A team of

2000
trained and
enthusiastic
professionals



3000

new customers to our list of

500,000
existing customers



Our success comes from the quality of our products, and the trust they inspire in our customers.

We are one of the few companies who have negligible advertising and marketing budgets and still are one of the highest recalled and popular brands in the domain.

We instead prefer to put our funds towards developing new, cutting-edge technologies that save lives.

360° FIRE SOLUTIONS



Ceasefire is equipped to and ready to take on any fire the very moment it sparks. This means that in your time of need, you can rest assured that Ceasefire will come to your rescue.



WHY CEASEFIRE?





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