

CEASEFIRE
THE SMART RANGE
Kitchen Firefighting Range



CEASEFIRE INDUSTRIES PVT. LTD.

Ceasefire Industries Pvt Ltd is the most trusted fire safety brand in India and a fast emerging global conglomerate. With its globally certified, holistically-integrated range of fire fighting solutions, the company is amongst the rarest in the world to have such a diverse product portfolio as part of one eco-system.

The company is a leading manufacturer of a 360 degree-unified product range that includes - A Complete line of Fire Extinguishers with the widest variety of extinguishing agents, Special Application Extinguishers, Highly-advanced In-Panel Suppression Systems, Total Flooding Systems, Greenest technologies including Inert Gas Based Suppression, Revolutionary Watermist Based Suppression Systems, Extensive range of Watermist and Wet chemical Based Kitchen Fire Suppression Systems, Hydrant Systems, Fire Alarm Systems and other highly-specialised fire fighting technologies.

This extensive product portfolio is built at the very forefront of technology and conforms to the highest global standards and carry a host of international certifications by world's top-notch quality agencies including - ISI, EN3, EN1866, BIS, LPCB, BSI, MED, PED, VDS, ISO9001. Manufactured at the company's state-of-the-art production facility in India, Ceasefire's fire fighting solutions are setting global benchmarks in quality..

Best names across industry segments in India and other parts of the world have counted on us for their safety, including global giants, MNCs, Government Agencies, Railways, Airports and Military & Strategic Establishments.

Totalling 500,000 customers. We've never let anyone down, ever.



A range certified for quality by the top-notch agencies in the world.



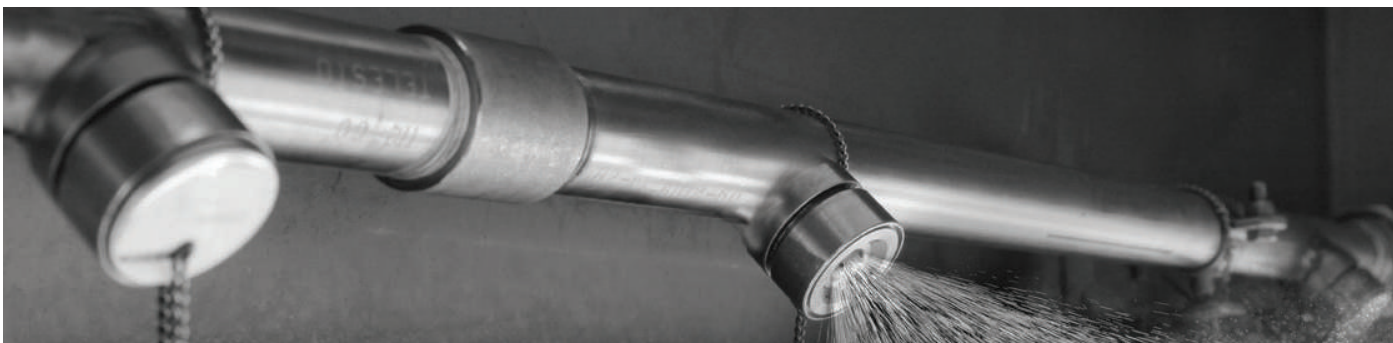
A FULL-SPECTRUM KITCHEN SYSTEMS RANGE



Ceasefire today offers an integrated range of kitchen fire suppression systems to suit the needs of every kind of a kitchen, be it a commercial one. The range includes Watermist & Wetchemical Based Systems for Commercial applications.

Certified by the world's best agencies

Ceasefire's Commercial kitchen systems are fully certified by LPCB to LPS 1223 standard.



CERTIFICATIONS

CEASEFIRE KITCHEN FIRE FIGHTING RANGE



LPS 1223
Cert/LPCB Ref. 1329a

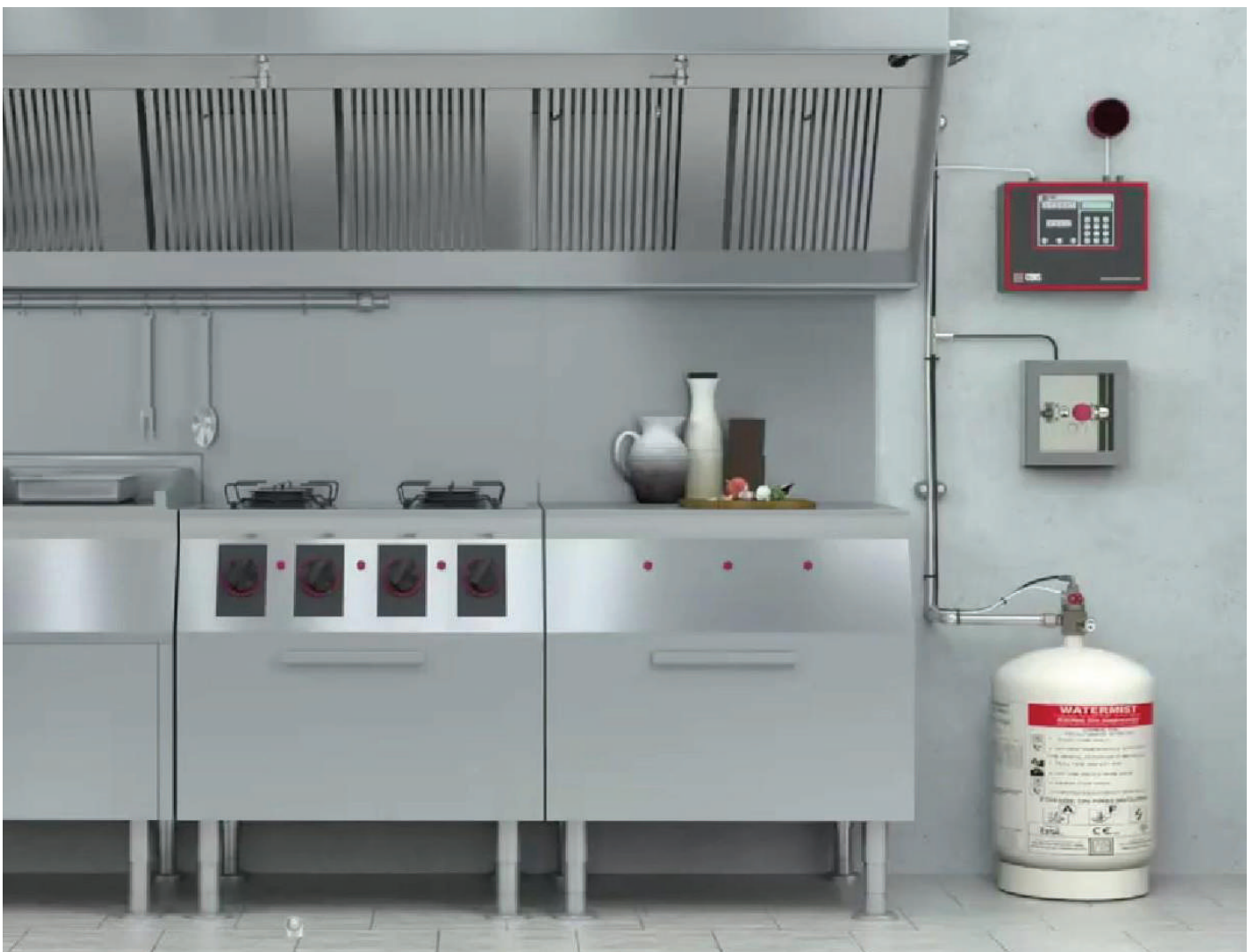
**Ceasefire's Kitchen Fire Suppression Range,
Including Both Watermist & Wet Chemical Based Systems**

FULLY COMPLIANT TO EN 16282-7

About EN 16282-7

“EN 16282-7 is a European Standard that lays forth the technical safety, ergonomic, and hygienic standards for the design, manufacture, and use of kitchen ventilation hoods. The ventilation systems in commercial kitchens, related spaces, and other facilities processing meals meant for commercial use must comply with this European Standard. Kitchens and associated areas are special rooms in which meals are prepared, where tableware and equipment is washed, cleaned, food is stored and food waste areas. A process for verification of each requirement is also well-defined.

By establishing uniform rules for performance testing, servicing & maintenance, and danger classifications such as fire, the new technical standard assists in bringing uniformity in regulations across the industry. The standard helps to better protect people, property, and businesses by bringing the restaurant industry closer to more effective commercial kitchen fire prevention.”



Value EN 16282-7 Brings to the Table



Ensures quality installation and maintenance of your kitchen suppression systems by authorised professionals



Reduced risk of kitchen fires



More comfortable and safe working environment for kitchen staff



Clear labels & manuals for quick & easy visual reference in case of fire emergency



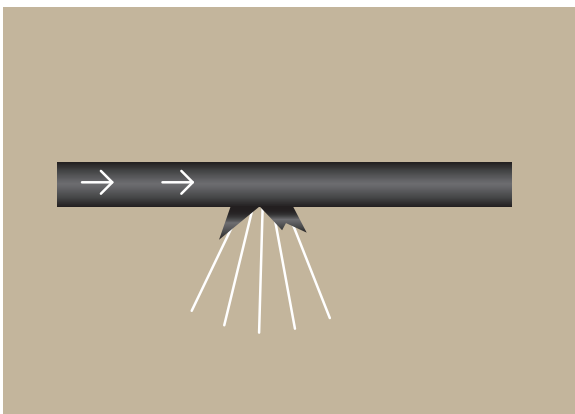
Adds repute to your kitchen, being a globally recognised safety standard

NEXT GENERATION TECHNOLOGY FOR KITCHENS

Advanced Heat Sensitive Tube Based Linear Detection

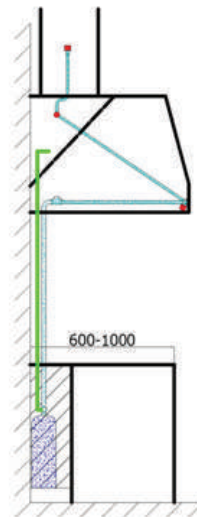


- 1** The most prominent feature of the Ceasefire Kitchen fire suppression systems is a specially designed heat-sensitive pneumatic polymer tube that runs unobtrusively throughout the length of hood including the plenum and the duct area.



- 2** When a fire breaks out, the heat-sensitive tube detects the rise in temperature and punctures at that point.

- 3** This triggers the system, which releases the extinguishing agent through a separate discharge line and expels it into the cooking area, plenum & the duct, through specialized nozzles ensuring no blind spots during fire fighting.



- 4** Dousing the flames by smothering them with the spray of the agent and bringing down the temperature to below combustion levels.

COMPLETE FREEDOM OF MOVEMENT TO THE CHEF

Flexibility to decide hot and cold cooking areas

The key advantage of the Heat Sensing Tube based detection is that it provides linear/uniform protection throughout the length of the kitchen hood, space behind the filters and even in the duct areas. This is a huge advantage over the spot-detection based systems using fuseable plugs/links which are sensitive to detect fire only under specific points under the kitchen hood. The feature gives complete freedom to the chef to move the hot (cooking) area and cold (preparation) area as per his wish or as the meal service of the day demands.



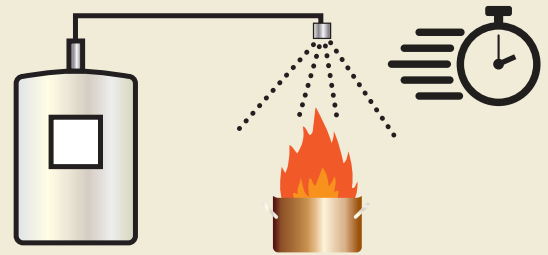
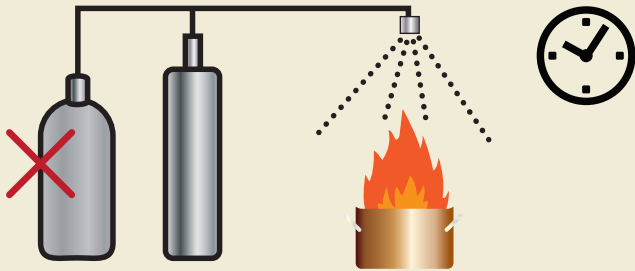
WHAT MAKES THESE SYSTEMS TRULY REMARKABLE!

Always Ready & Low on Maintenance

The USP of the Ceasefire kitchen suppression systems is that being Stored Pressure Type systems, these are swift & powerful and require minimal maintenance as compared to cartridge type or pump based systems.

Low Pressure; Safe Systems

The systems are low pressure type (15 bar pressure), making them absolutely safe for people in the kitchen.



Highly Intelligent Response Panel

The systems comes fitted with a state-of-the-art Response Panel that not only gives a ready health check of the system, but makes it integrateable to other third party devices present at the premises like Fire Alarms, Gas Shut-off Valves, etc. The unique design of the Cylinder Valve makes it tamper proof and safe against accidental shutting-off of the system while cleaning or maintenance. Status of the open/close position of the valve can be readily checked in the large & clear LCD display of Response Panel.



The Ceasefire Kitchen Fire Suppression Systems provide effective protection for kitchens with all types of cooking applications like frying, stir frying, roasting, baking.

IN-HOUSE DESIGN CAPABILITY

Customized for Every Kitchen

The true advantage of Ceasefire's Kitchen Fire Suppression Systems come with the company's In-house Design Capability. The Design cell comprises of a team of qualified Engineers, CAD Designers and Fire Experts who have extensive experience of customizing fire suppression systems for a wide variety of commercial & domestic kitchens.

Every system is customized for the kitchen it is installed in, considering the length of the kitchen hood along with every other aspect of fire threat & assessment of collateral damages at the premises. The design of every system follows predefined guidelines and principles laid out by LPCB, the quality certification agency for Ceasefire Kitchen Systems.



SPECIALIZED FIRE EXTINGUISHERS TO COMPLEMENT THE RANGE

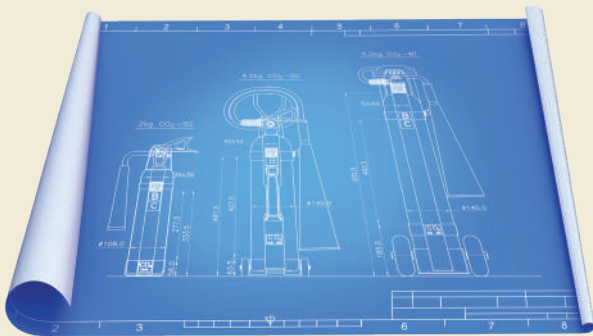
In addition to the range of Kitchen Fire Suppression Systems, Ceasefire offers specialized fire extinguishers for kitchen applications. These include Watermist, Foammist and Wet Chemical extinguishers of sizes 2, 3, 6 & 9 ltrs 2 & 6 ltrs and 3, 6 & 9 ltrs respectively.

These agents have a proven track record against the specially challenging kitchen / super heated cooking oil fires. While Watermist kills the kitchen fires by rapid evaporation in the fire zone and blocking oxygen and bringing down the temperature, Foammist & Wet Chemical do the job by a powerful blanketing effect on the fire and bringing down the temperature to below combustion levels.



PARTNER WITH CEASEFIRE.

Ceasefire hand-holds its business associates to grow along with the organization. There are a number of facilities & services designed to give our partners a platform to gather knowledge and use the Ceasefire market experience to their advantage.



Extensive Technical Support: A key support to the Ceasefire Business Associates is the carefully crafted Technical Support module from the company.

This module allows a Ceasefire Business Associate to request support through:



Email



Call



Live Call Support



Accompanied Calls

Ceasefire embeds extensive training and development into its system to build a unique competitive edge.



Ceasefire Academy of Forging Excellence (CAFE):

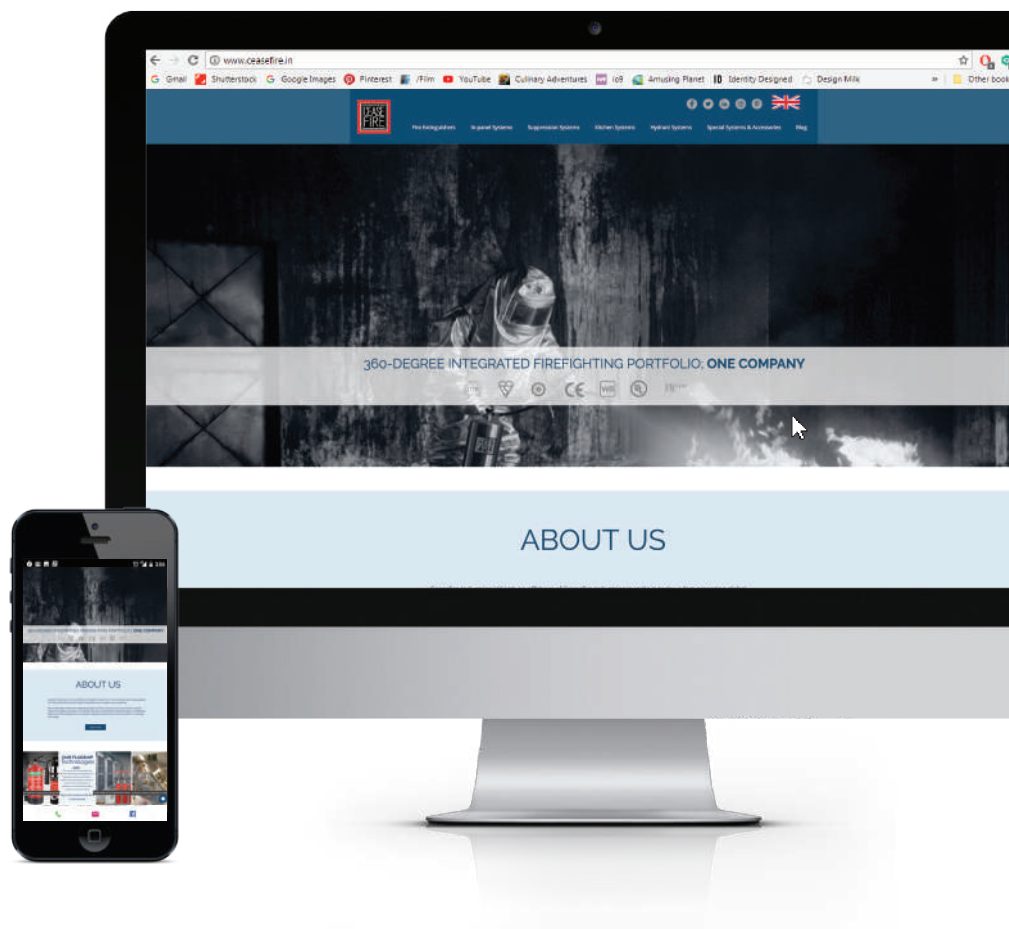
Most advanced training platform with a blended learning approach deploying effectively online training, instructor-lead sessions, tests and periodic evaluation.



Live Webinars:

These Webinars are an effective tool at the disposal of the Business partner to market the Ceasefire technologies to their customers, in addition to using these as a self-learning and doubt clearing sessions.

Ceasefire E Proposal Utility: Our Business associates get access to their exclusive login page on the Ceasefire Customer Relations Portal (CCRM), which acts as the single dashboard window to access every resource available for them in the company. The module allow the users to create most appealing and customized proposal documents at the click of a button. The portal is a repository of standard proposal templates as well as elaborate Digital Library that hosts a variety of documents like Data Sheets, Certificates, Videos, Product Brochures and lot more.



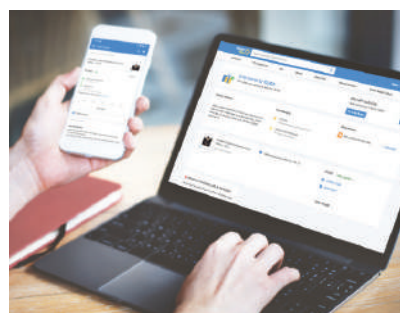
The Ceasefire partner support does not end at providing technical and product support. We go an extra mile to give marketing and logistic support to our partners to ensure its a winning game for them.



Marketing Collaterals + Emailer Module:

The CCRM login page gives business associates access to a whole host of marketing collaterals like brochures, print ads, social media/digital ads, BTL collaterals and more.

Apart from the support on marketing collaterals, the system also enables the business partner to automate email marketing, SMS and Whatsapp marketing for themselves.



Order Tracking & Logistics:

The CCRM Login also provides a very smart dashboard view to Ceasefire Business Associates to be able to track all-important events, activities & their progress. This includes the status of their orders, payments, dispatch, transit, billing and much more.

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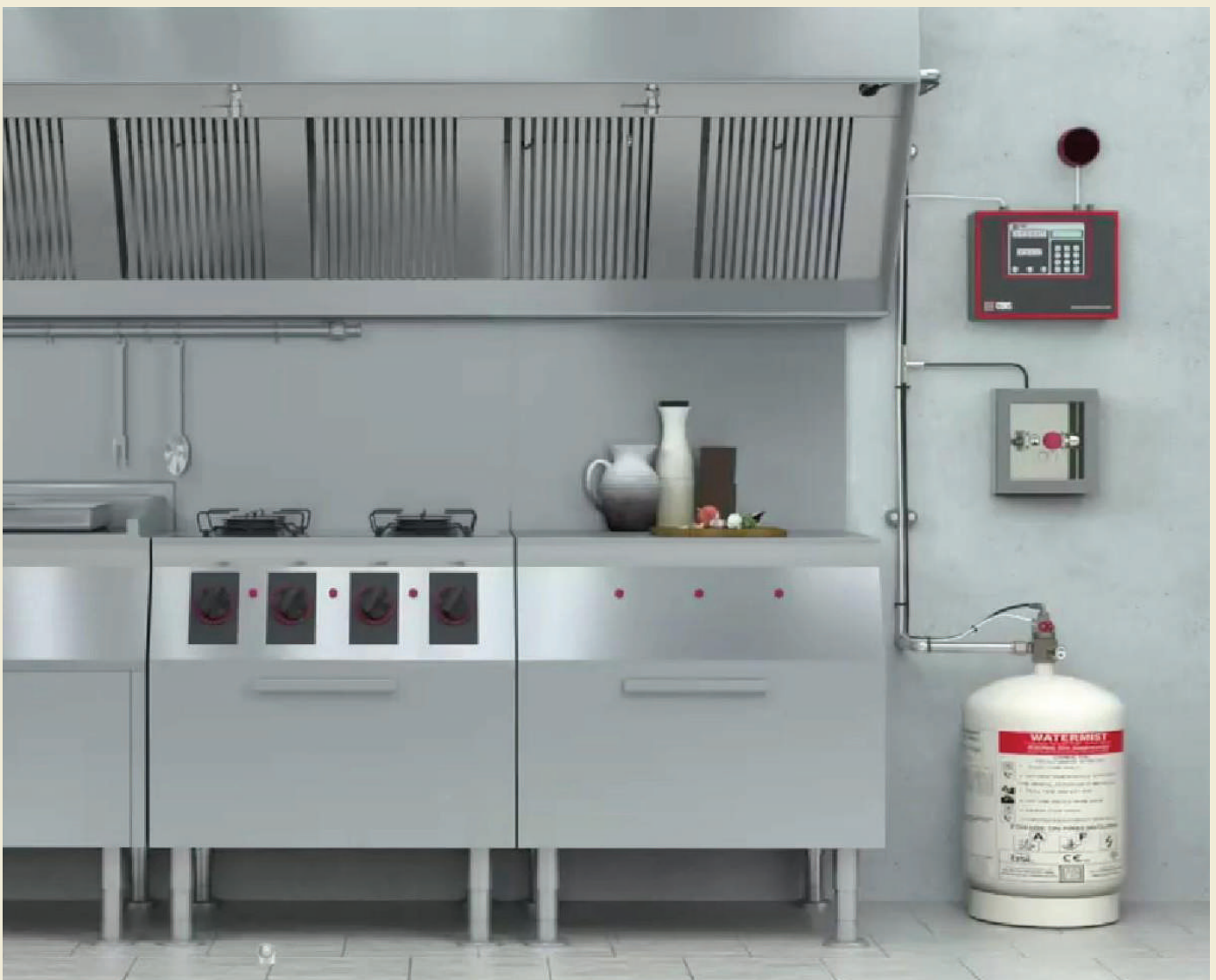
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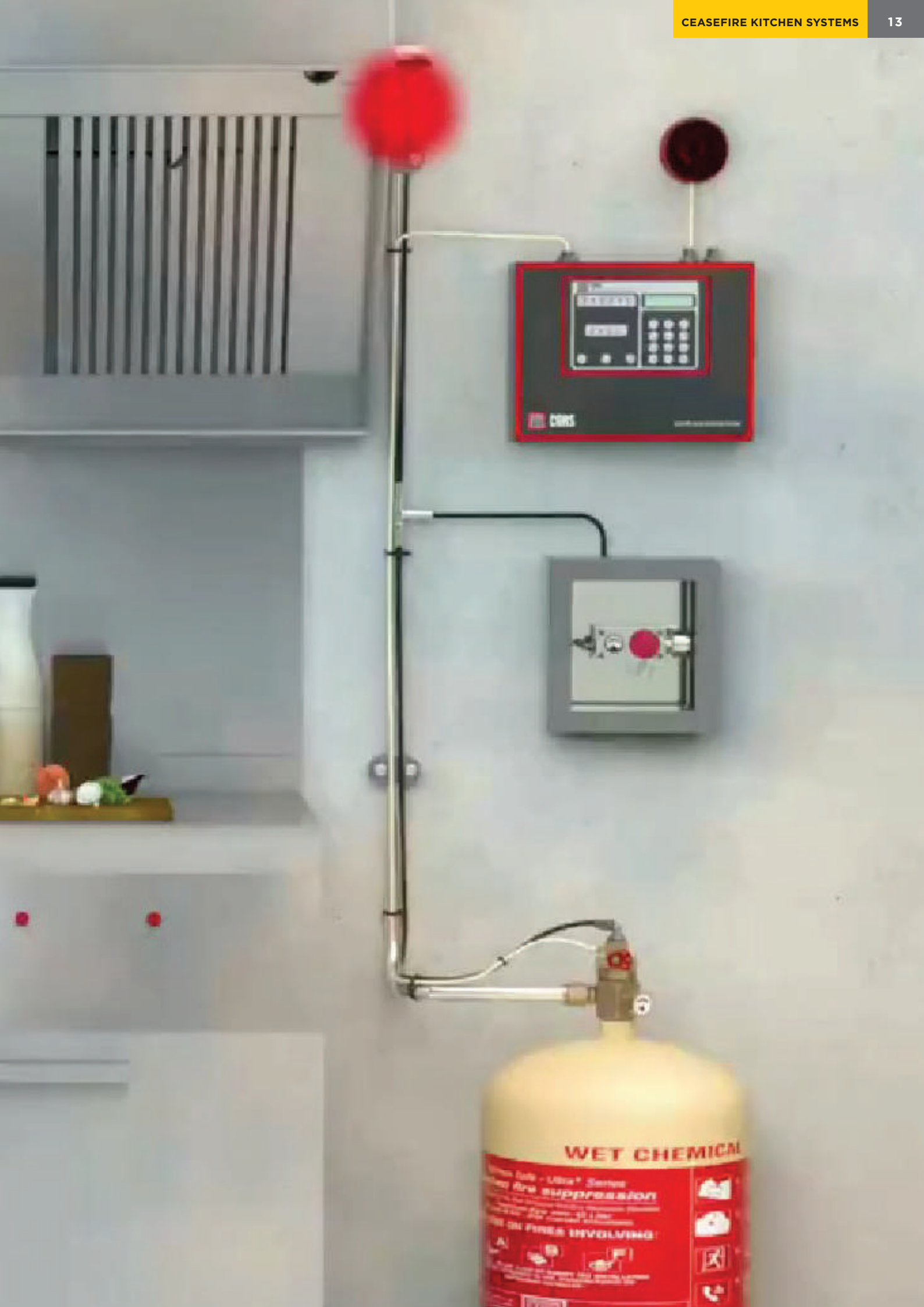
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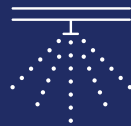






SMART RANGE

CEASEFIRE'S KITCHEN FIREFIGHTING RANGE



INTRODUCING THE CEASEFIRE KITCHEN FIREFIGHTING RANGE



There is no denying the fact that fire is central to cooking. Every day, restaurants, cafés, bakeries and commercial kitchens use it to create a myriad number of delicacies. However, the liberal use of fire, and the presence of combustible substances like oil, make it almost easy for an accident to flare up.

In large hotel chains with hectic, time bound meal services keeping the staff rushing around, these accidents are just waiting to happen. Such an accident can shut down your operations for several days, causing a substantial loss of business revenue. Not to mention the irreversible damage to the reputation of the brand you've carefully built over the years...gone in minutes.

While fires on their own are dangerous, kitchen fires take things to a whole new level.

Kitchen fires are some of the toughest, fiercest fires to fight and control. Cooking areas and kitchen hoods are particularly prone to accidents.

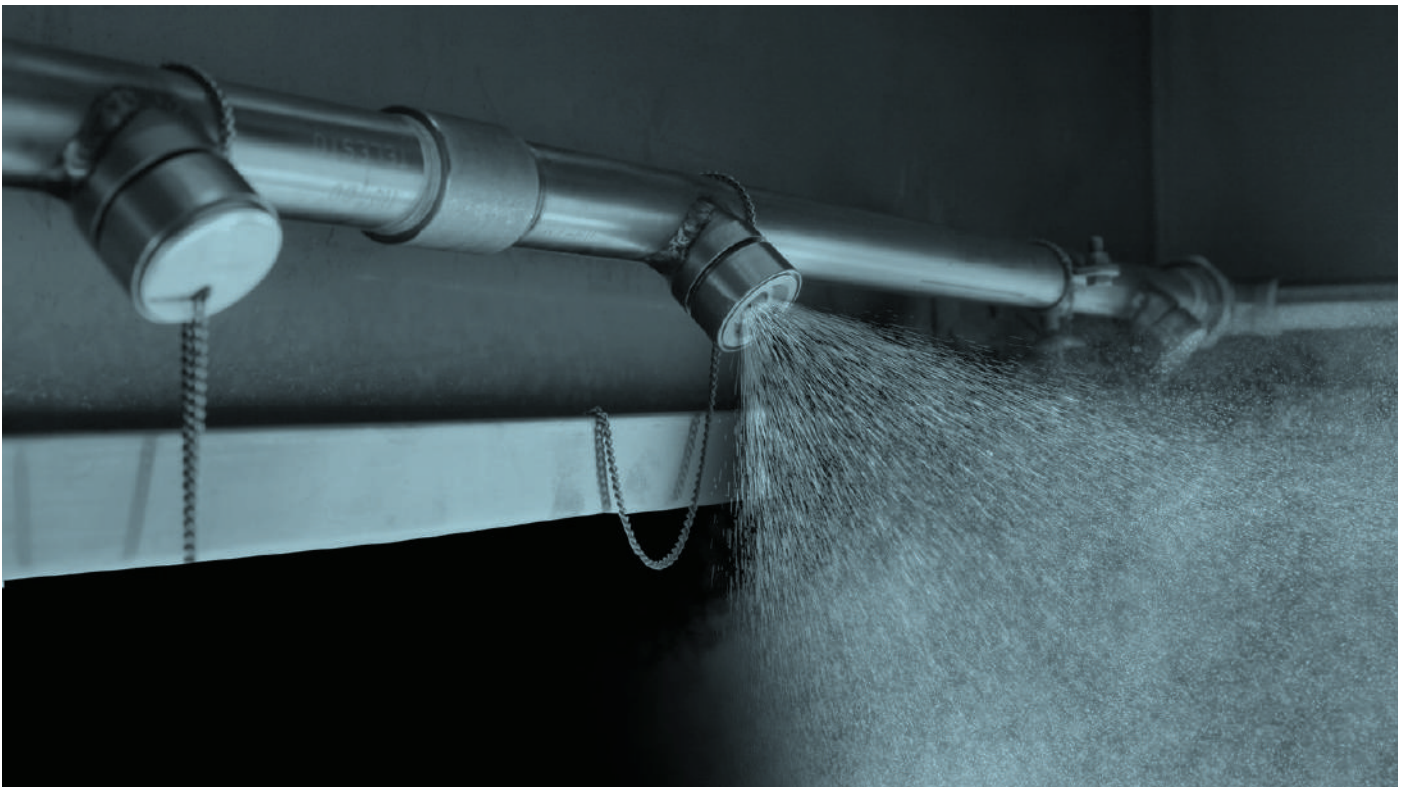
Once oil reaches a certain temperature, it releases fumes that burn at a lower temperature than oil. In seconds, this can turn into a fire situation threatening to get out of control, reaching temperatures as high as 350°C, endangering precious lives and destroying expensive kitchen equipment. What's more, with other inflammables like LPG on the premises, the danger is considerably aggravated.

Until recently, the only way to put out an oil fire in the kitchen was by using conventional extinguishers, which destroyed all the ingredients in the kitchen, not to mention being harmful to the environment as well.

There was an urgent need for specialised extinguishers and systems to come to the rescue. That's where Ceasefire comes in. Developed using cutting-edge technology, the Ceasefire Kitchen Firefighting Range offers 360° protection for your establishment's kitchen. These lifesaving equipment are so advanced they've been certified globally to be among the best in the world. Which is why, whether it's a small café or a large industrial kitchen, Ceasefire is equipped and ready to protect.



Watermist Kitchen Firefighting Range



The Watermist Based Kitchen Fire Fighting Range:

Ceasefire's range of watermist based kitchen fire fighting solutions has an automatic kitchen fire suppression system and a range of portable extinguishers to guard all kinds of kitchen centric premises.



Range Of Kitchen Suppression Systems (Watermist):

Watermist systems are designed to protect different hood sizes against fire - with no collateral damage.



The Ceasefire Watermist and foammist based Portable Extinguisher:

A standalone watermist and foammist fire extinguishers can take on and bring down an oil fire with ease.

Wet Chemical Kitchen Firefighting Range



The Wet Chemical Based Kitchen Fire Fighting Range :

Powered by a Wet Chemical, Ceasefire's range of automatic kitchen fire suppression system and a range of portable extinguishers are ideal first line of defense for any kind of commercial kitchens.



Range Of Kitchen Suppression Systems (Wet Chemical):

Ceasefire's Wet Chemical-based fire suppression systems are specially designed for kitchen hoods and built to fight oil fires without any flooding-related collateral damage.



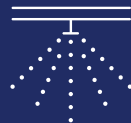
The Ceasefire Wet Chemical Portable Extinguisher:

Ceasefire's Wet Chemical-based fire extinguishers are ideal to combat cooking oil based fires that arise in commercial kitchens.

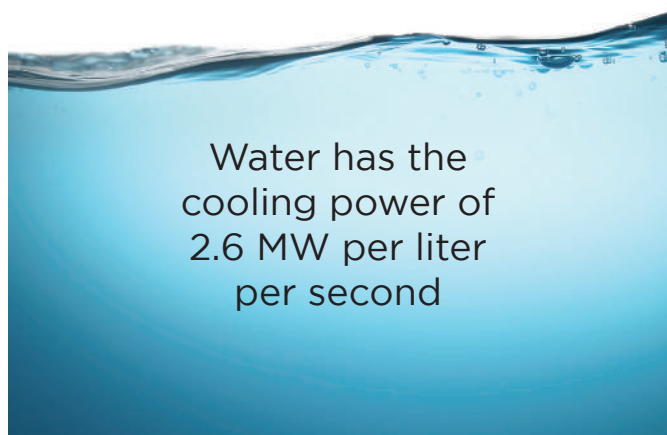


SMART RANGE

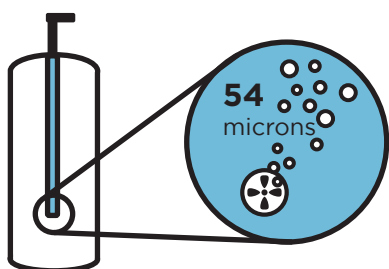
WATERMIST BASED KITCHEN SUPPRESSION SYSTEM



HARNESSING THE POWER OF WATER, AND MULTIPLYING IT.



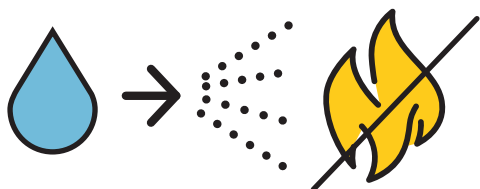
It's common knowledge that there is no extinguishing agent more potent than water. With its massive cooling power of 2.6 MW per liter per second, water kills even the largest of fires in minutes. But even fire's worst adversary has its shortcomings. Using water on oil fires or an electrically started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



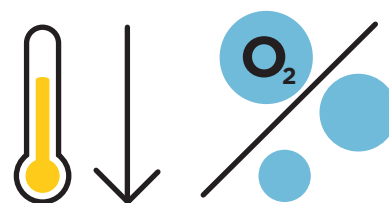
First, the Multi-Rotors and Nozzles located within the **system turn water into droplets of 54 micron size** by mixing it with air in a pre-set proportion.



This makes it the only system of its kind that combines two revolutionary technologies - Watermist and stored pressure - into an extinguisher that **can take down even the largest of fires, including oil and electrically started fires.**



This produces Watermist, which **increases the coverage area of water to fight fires many times over.** The stored pressure technology is used to deliver Watermist with a kinetic force strong enough to overcome the fire's own convection currents.



When Watermist falls on the fire, it **rapidly brings down the temperature to below combustible levels, cuts off the oxygen supply and kills the flames.**

ENVIRO SERIES / ENGINEERED

WATERMIST BASED KITCHEN SUPPRESSION SYSTEM

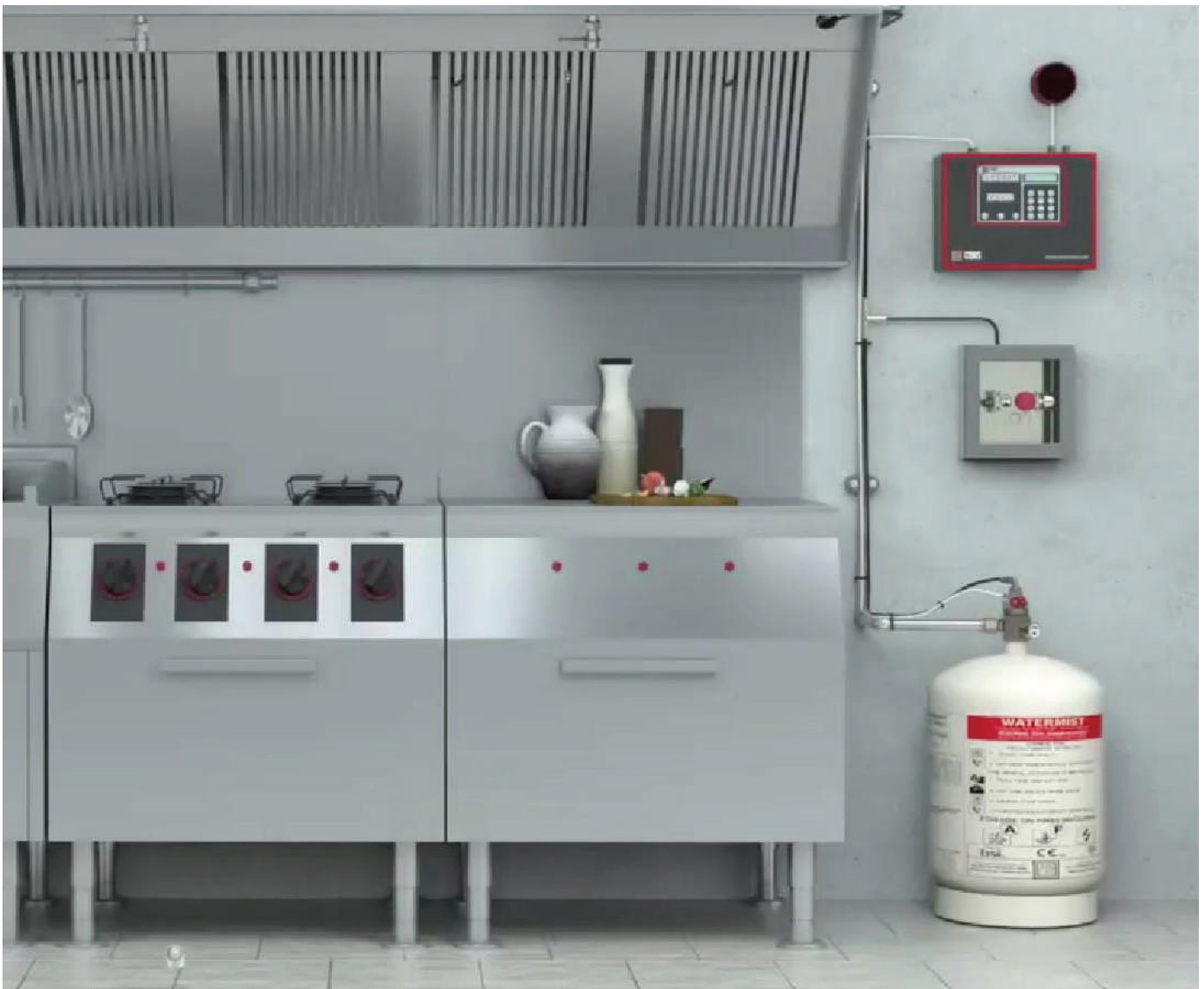
CERTIFIED BY LPCB FOR
LPS 1223 STANDARD



The Watermist Based Kitchen Suppression System comes with an advanced detection mechanism. Its Pneumatic Heat Sensing Tubes run through the length of the hood, covering all vulnerable areas giving continuous protection.

In an event of a fire, these tubes (pressurised with N_2) burst at a pre-set temperature - creating a puncture in the tube - allowing the pressurised nitrogen to escape and the pressure to drop. This fall of pressure activates the valves, allowing the rotors placed inside them to mix air and water in pre-set proportions.

When these particles of air and water reach the nozzles, their combined velocity atomises the water particles to create micro-mini droplets of 54 microns. And it is this Watermist that's propelled through the nozzles onto the fire. Quickly turning into steam, blocking the oxygen supply, and bringing the temperature to below combustion levels.



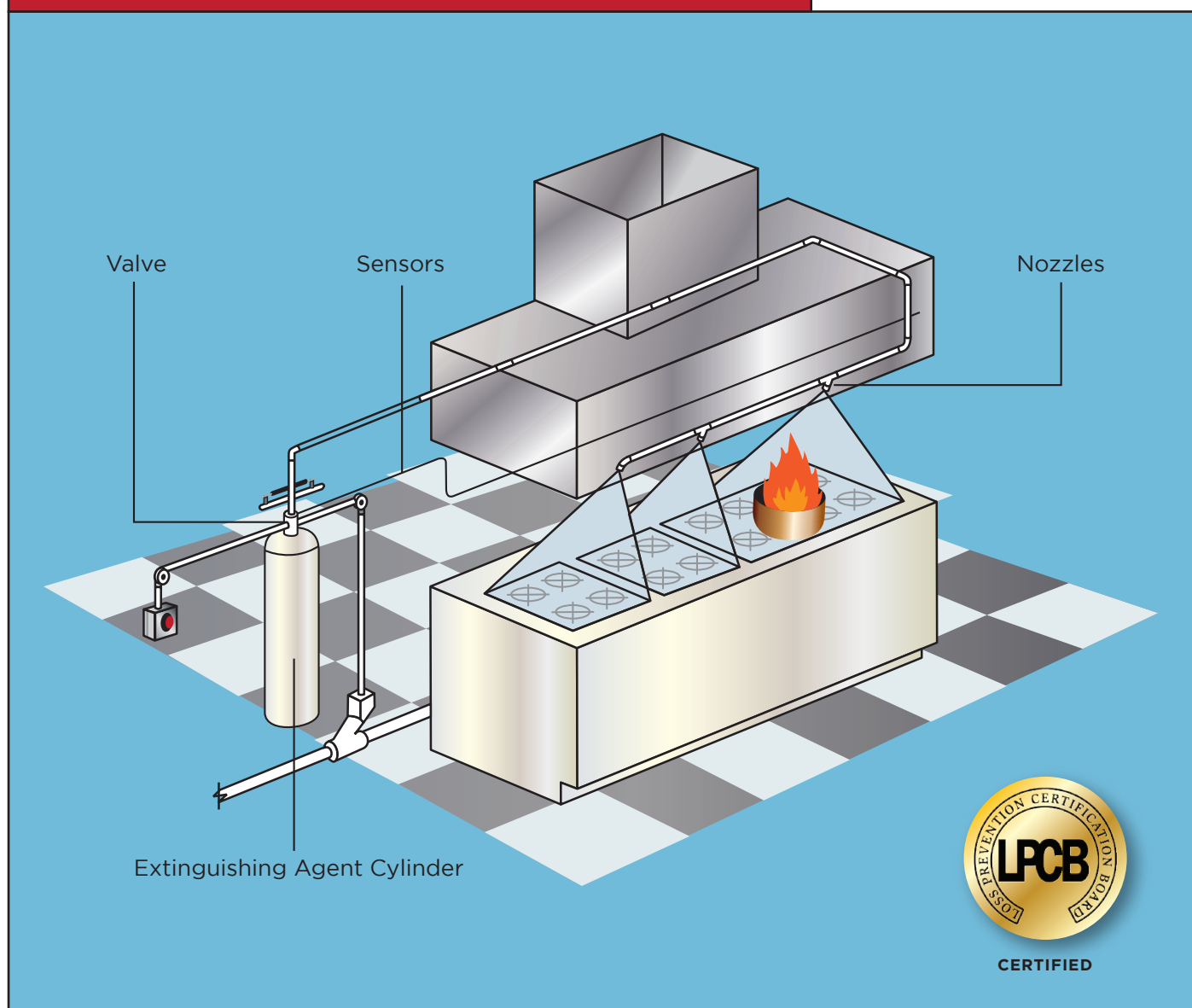
The huge benefit of Watermist is that it is an absolutely clean extinguishing agent. Which means it doesn't cause any damage; either to the expensive kitchen equipment or food items. Allowing the kitchen to get back into action without any significant downtime.

Another big advantage of the system is the Heat Sensing Tubes, that provide uniform, multi point detection throughout the length of the hood; unlike the fusible plug/link based detection which is built to detect fires right below the point where

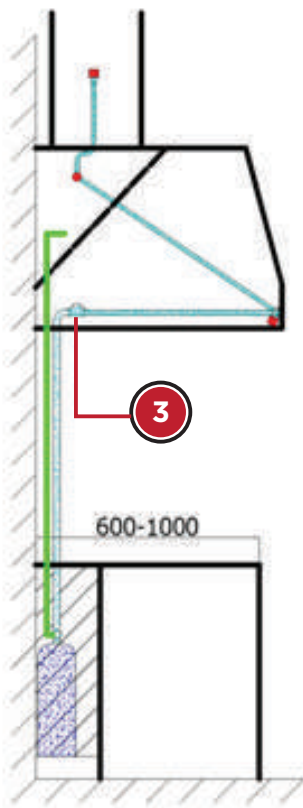
they are placed. This enables the chef to move the hot area as per the requirement of the meal service, without any hassle.

The nozzles too are versatile, and are designed to extinguish fires arisen due to deep frying, shallow frying, baking, grilling or roasting.

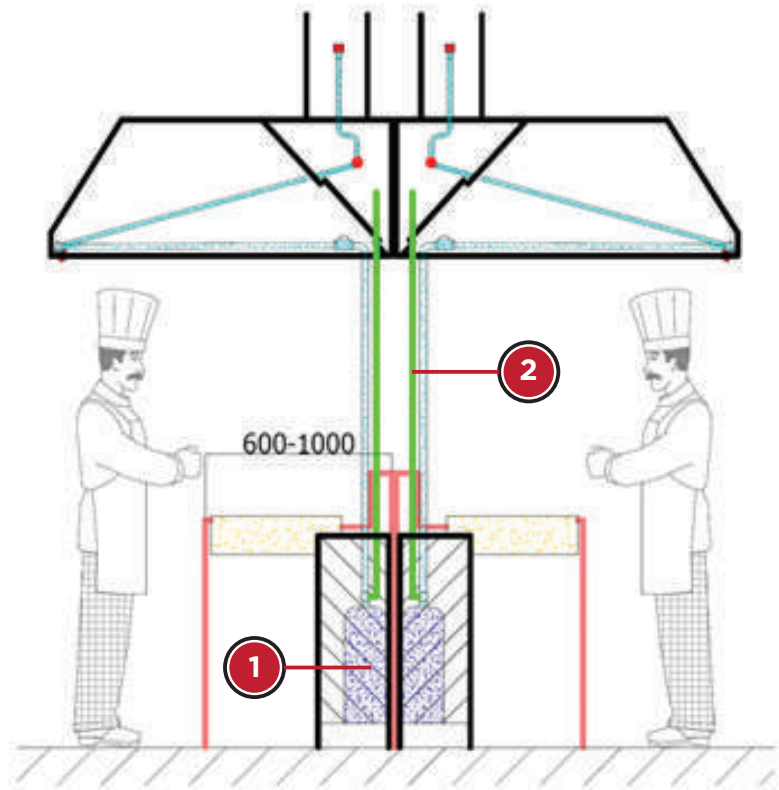
CEASEFIRE'S WATERMIST BASED KITCHEN SUPPRESSION SYSTEM



Key Components of the System



View from the side of the wall mounted hood.









View from the side of "hanged" hoods.




- 1 Supply Unit**
The supply unit is based on rotors placed in cylinders filled with demineralised water (50-72% volume of cylinder) and gas compressed to 15+1 bars. The quantity of used rotors, cylinders and their volume depends on the size of the protected kitchen. Rotor assembly is designed to produce a pulsating flow of water, by supplying the fire extinguishing system with the proper proportions of gas and water.
- 2 Piping**
The fittings are made of 304 grade stainless steel. The piping length and diameter depend on the size of the fire extinguishing system.
- 3 Multi-nozzle and Single Nozzle Heads**
These H-type heads are provided with CSFH nozzles. Similar CSFH heads are also used separately in the area behind filters or in the ventilating hood. Protection caps are used to protect the installed heads against contamination of the nozzle hose during normal operation of the kitchen. The systems use several types of heads, depending on the size of the kitchen being protected.
- 4 Detection and Actuation Unit**
The detection system gives the signal to the actuation unit, which automatically starts up the fire extinguishing system. The system has manual actuation too.

CEASEFIRE'S WATERMIST BASED KITCHEN SUPPRESSION SYSTEM GIVES YOU MORE:

- LPCB Certified System
- No collateral damage and zero downtime due to contamination thanks to Watermist
- An eco-friendly alternative to conventional extinguishing systems
- Works on class A, B, F (oil) fires and fires involving electrically charged devices
- Specially designed nozzles that use minimum water and give maximum extinguishing power
- Its heat-sensitive tube offers superior uniform protection as compared to conventional Point Detector-based Systems
- Available in 27 liters and 56 liters

Features of the Watermist Based Kitchen Suppression System

	24-hour Protection - Automatic detection and actuation controls ensure fire protection is always 'up'.
	Multiple Triggers - The system can be triggered either by the manual actuation system or the automatic detection system.
	Highly Effective - Watermist prevents re-ignition by cooling down the temperature of the heated oil.
	Minimal Downtime - The clean water leaves no toxic chemicals, doesn't damage eatables and reduces post-fire damage, ensuring the kitchen is back in service quickly.
	Unobtrusive Design - Flexible piping configurations allow for a streamlined design and convenient installation that won't interfere with kitchen workflow.
	Highly Reliable - A fully assembled and 100% tested Mechanical Control Head ensures reliable operation. Pressure gauges on the steel cylinders mark the gas levels, allowing maintenance staff to replenish it whenever required. Protective chrome nozzle covers keep the nozzles free of contamination and blockages caused by grease or other cooking by-products.

	Highly Flexible - Available in a variety of sizes that can be customised as per the application.
	LPCB Certified System
	2 Variants - Available in two variants - 27 ltr & 56 ltr.



Watermist Based Kitchen Suppression System Components

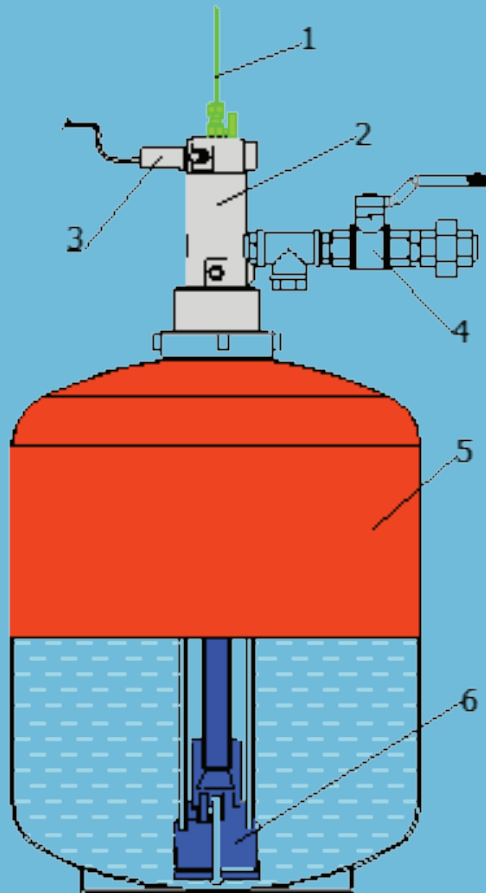
1. SINGLE CYLINDER SUPPLY UNIT

The supply unit is based on rotors placed in cylinders filled with demineralised water (50-72% volume of cylinder) and gas compressed to 15+1 bars. The quantity of used rotors, cylinders and their volume depends on the size of the protected kitchen. Rotor assembly is designed to produce a pulsating flow of water by supplying the fire extinguishing system with the proper proportions of gas and water.

Various types of supply units can be used for kitchen extinguishing systems. They can differ with the number of cylinders, actuation mechanism and detection signal type.

Cylinders with rotors inside are filled with water up to 72% of the cylinder capacity and nitrogen/air is under the 15 bar pressure based on the following calculation:

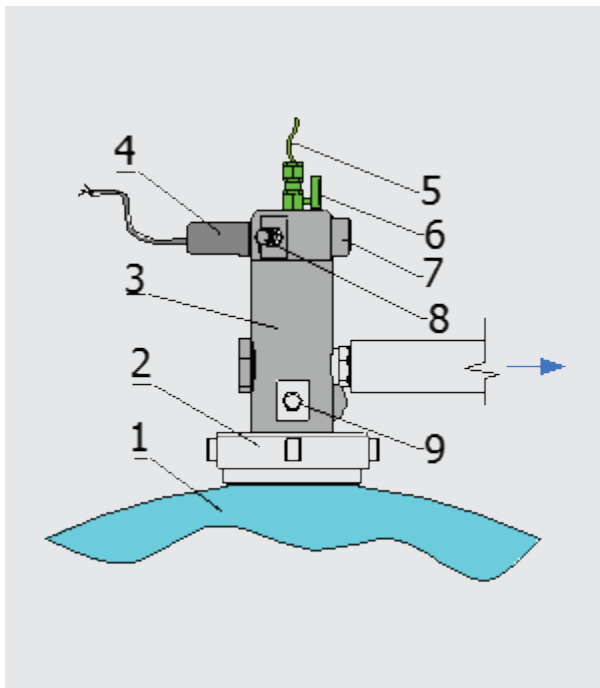
3 liters of water per main nozzle are used in the system and 2 liters per nozzle behind the filter and in the duct. The cylinder(s) must be filled with water up to maximum 72% of the total cylinder volume. The remaining volume must be filled with gas pressurised to 15+1 bar.



An example of the supply unit wherein one cylinder is placed with a multi-rotor set containing four rotors.

1. Detection tube
2. Indirect differential valve
3. Pressure switch
4. Servicing valve
5. Cylinder
6. Multi-rotor unit

2. INDIRECT DIFFERENTIAL VALVE



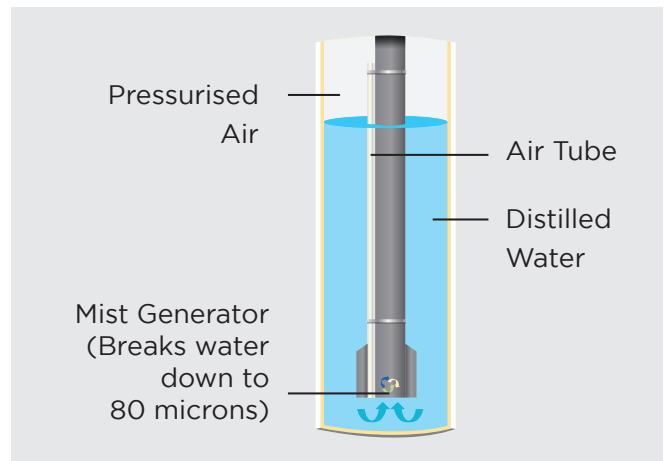
A pneumatic differential valve is used for pressure detection – fusible plug or pneumatic tube detections. A pressure drop in the system opens the valve.

An indirect valve actuation unit is used with single cylinder supply units with pressure detection.

1. Supply cylinder
2. Cylinder nut
3. Indirect differential valve
4. Pressure switch
5. Detection tube
6. Detection servicing valve
7. Pressure gauge
8. Gas filling valve (to min. 4 bar)
9. Gas filling valve (to 15 bar)

3. MULTI-ROTOR SET

The rotors installed in cylinders produce a mixture of water and nitrogen/air, which flow in a pulse manner. After system actuation, the medium flows out of the cylinders through the manifold into the main system pipe and further, via the pipeline, into the nozzles located under the hood.



4. PRESSURE SWITCH



Every supply unit is equipped with a pressure switch, which gives a signal when the system is actuated. The signal can be used to cut off the power supply to the protected kitchen.

Optionally, one more pressure switch can be used to relate information of a pressure drop in the system via a local alarm system.

5. CEASEFIRE HEAT SENSING TUBE

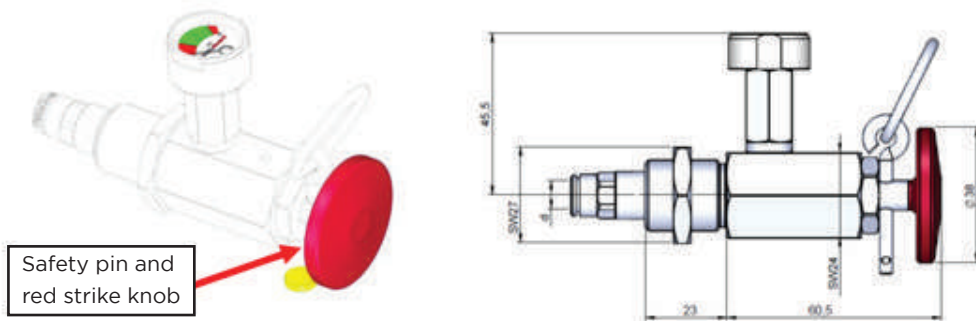


In the Watermist based Kitchen Suppression System, the standard fire detection device is the Ceasefire heat sensing tube. Ceasefire's heat sensing tubes are made of high-tech plastic and are developed especially for the installation and application in automatic fire extinguishing systems.

The prescribed operating pressure is applied to the heat sensing tube after the proper installation. Due to the thermal material properties and the inner over-pressure, the heat sensing tube will burst when touched by a flame or subjected to an excessive heat increase, therefore functioning as a reliable detector in the case of a fire.

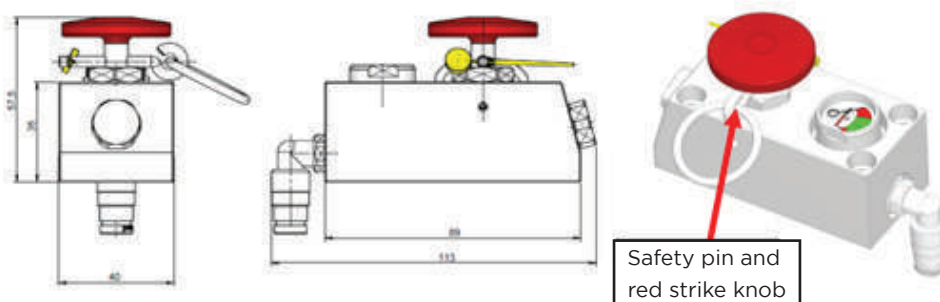
6. MANUAL ACTUATOR

Manual triggers are installed in or at the end of the detection line and simulate the heat sensing tube to burst when actuated. The drop of pressure thus generated triggers the valve.

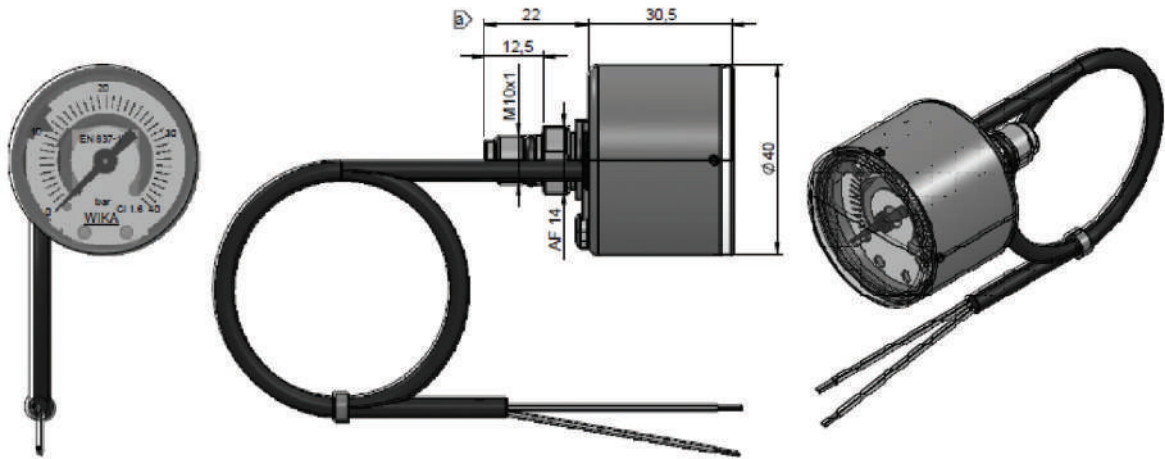


The installation of a manual trigger is mandatory.
To actuate the manual trigger, pull the safety pin and press the red strike knob.

7. CEASEFIRE MULTI-BLOCK



11. CONTACT GAUGE WITH SWITCHING CONTACT



This is used to switch off the equipment when the extinguishing system is actuated. The signals can be used to cut the energy supply and, for example, switch off the extractor fan. The heat source can be stopped, as well as the extraction, but this is, however, not compulsory.

A ventilation system left running can move any smoke or exhaust gases to the outside. The decision for this option lies with the system designer, who implements it according to the customer's requirements.

Pressure range	:	0 - 40 Bars
Set points	:	11 Bars or 17 Bars
Switching mode	:	Without pressure -->Contact close (NC)
Pressure above switch point -->	:	Contact open
Switching tolerance	:	32.5% Full scale value

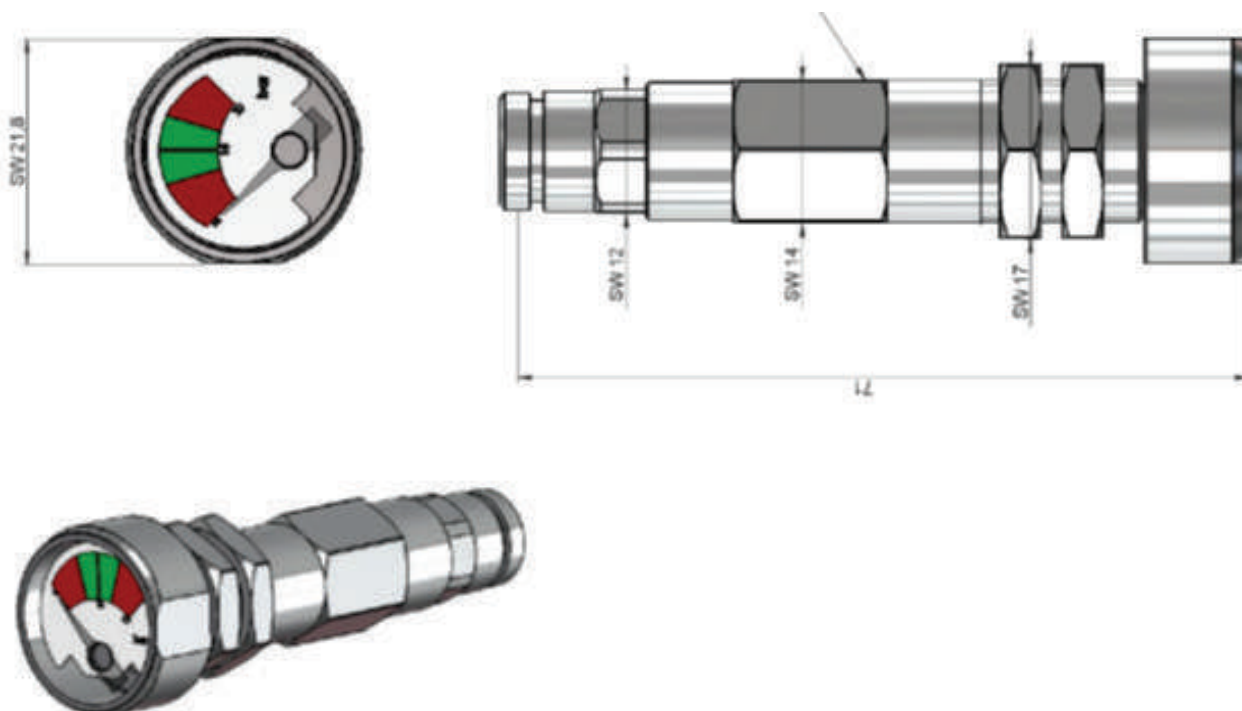
Pressure gauge with limit signal transmitter type:

PGS 21.050 with double contacts applications:

- Pressure monitor for use in high pressure gas fire extinguishing systems.
- To display and monitor the container pressure and report container contents losses.
- General industry application - **Accuracy class 1.6**

Nominal size	:	50 mm
Ingress protection	:	IP65 according to EN60529 / IEC 529
Case	:	Stainless steel
Measuring element	:	Copper alloy
Motion work	:	Copper alloy
Dial	:	Aluminium white
Pointer	:	Black plastic
Viewing glass	:	Polycarbonate
Helium leakage test	:	Leakage rate 10 ⁻⁵ mbar l / sec
Electrical data	:	Switching voltage: 4.5 V ... 24VDC/VAC (330%)
Switching current	:	5 ... 100mA
Contact load	:	Max. 2.4 W potential-free
Compressive strength	:	Steady load: 3 / 4 x full scale value
Operating temperature	:	Ambient: -20 ... +60°C

12. END OF LINE ADAPTOR



13. NOZZLES

The main fire extinguishing line is installed along the front edge of the hood. It consists of CSFH type or type H multi-nozzles, which are basically manifold CSFH nozzles.

The manifold pipe can be of diameter DN 15 (½”).



1. For hoods with 0.4 - 0.8 m distance from the worktop, CSFH 16 nozzles are used.
2. For hoods with 0.8 - 1.5 m distance from the worktop, CSFH 08 nozzles are used.

NCSFH 08 Nozzle Data Sheet

Full description: NCSFH 08.X.Y

NCSFH - Net Filter Circle Single Fluid Head

08 - Model number

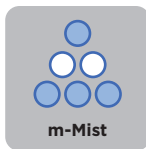
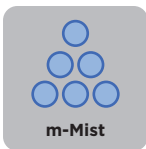
X - Kind of material:

- 1** stainless steel (316)
- 2** stainless steel (304)
- 3** brass (C37800)
- 4** brass (CuZn36Pb2As)

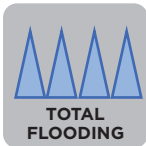
Y - 0 without cap

- 1** silicone protection cap
- 2** stainless steel

System Type:



Application:



NCSFH 08.1.0



NCSFH 08.1.1

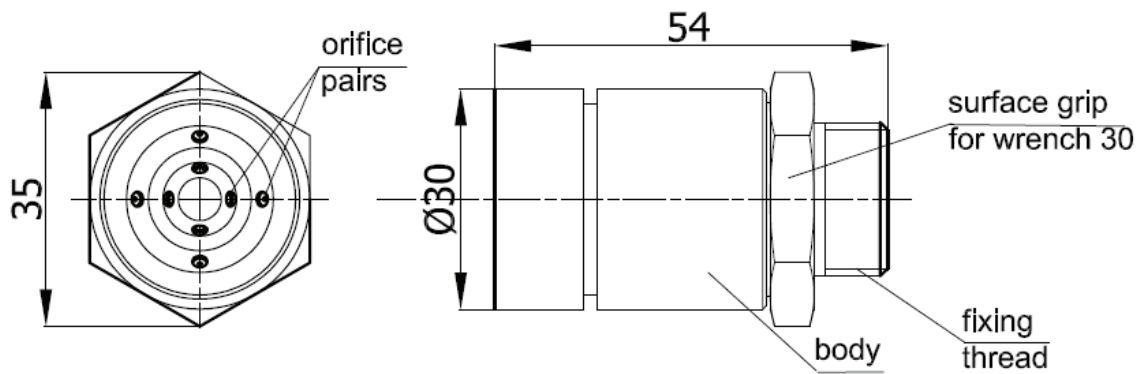


NCSFH 08.1.2

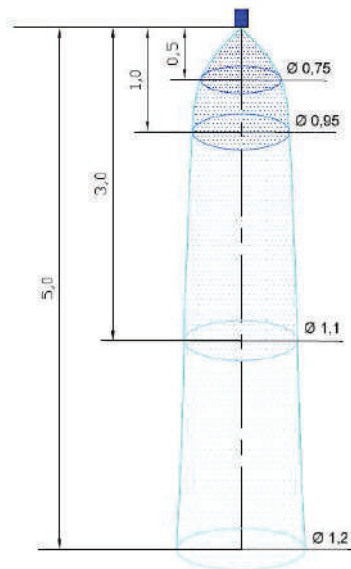
TECHNICAL PARAMETERS

Basic extinguishing media	: Water
Net filter opening	: 0.4 x 0.4 mm
Droplet size Dv	: 505 - 110 µm
Connection size	: " BSP ext.
Inlet pressure	: 6 - 16 bar
K factor	: 3.0
Number of orifice pairs	: 4
Head weight	: 0.2 kg
Protection cap	: Silicon cap Cat. No. - N 116 SS cap Cat. No. - K 059

TECHNICAL DETAILS



MIST STREAM



MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
K flow factor	:	3.0			
Extinguishing agent expenditure [lit/min]	:	7.5	8.5	10.5	12.0
Effective stream range * [m]	:	1.6	1.8	2.1	2.4

*Range of horizontal stream.

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

NCSFH 10 Nozzle Data Sheet

Full description: NCSFH 10.X.Y

NCSFH - Net Filter Circle Single Fluid Head

10 - Model number

X - Kind of material:

1 stainless steel (316)

2 stainless steel (304)

3 brass (C37800)

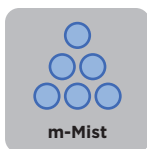
4 brass (CuZn36Pb2As)

Y - 0 without cap

1 silicone protection cap

2 stainless steel protection cap

System Type:



Application:



NCSFH 10.2.0



NCSFH 10.1.1

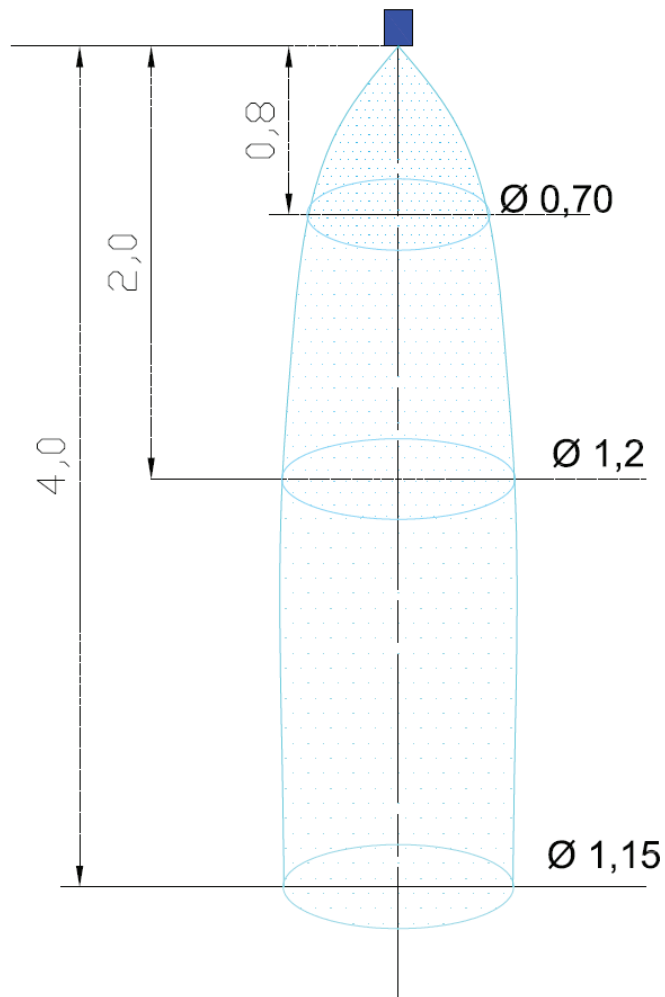


NCSFH 10.1.2

TECHNICAL PARAMETERS

Total flow surface	: 4.7 mm
Basic extinguishing media	: Water, gas and water (ROTOR)
Net filter opening	: 0.4 x 0.4 mm
Connection size	: " BSP ext.
Inlet pressure	: 6 - 16 bar
Number of orifice pairs	: 4
Head weight	: 0.2 kg
Protection cap	: Silicon cap Cat. No. - NA003 SS cap Cat. No. - NA001

TECHNICAL DETAILS


ROTOR MIST SYSTEM - MIST STREAM

ROTOR MIST SYSTEM - MIST STREAM PARAMETERS

Initial pressure of work [bar]	: 15
Droplet size D_v [μm]	: 45 - 7t5
The minimum distance required to develop a stream of water mist [m]	: 0.4
Effective stream range*** [m]	: 2.3

*May vary $\pm 5\%$. | **Range of horizontal stream | ***Measurement in 30 second of action.

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

NCSFH 11 Nozzle Data Sheet

Full description: NCSFH 11.X.Y

NCSFH - Net Filter Circle Single Fluid Head

11 - Model number

X - Kind of material:

1 stainless steel (316)

2 stainless steel (304)

3 brass (C37800)

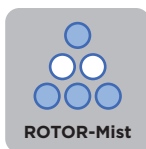
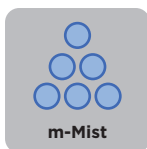
4 brass (CuZn36Pb2As)

Y - 0 without cap

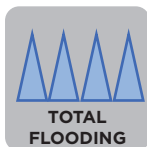
1 silicone protection cap

2 stainless steel protection cap

System Type:



Application:



NCSFH 11.1.0



NCSFH 11.1.1

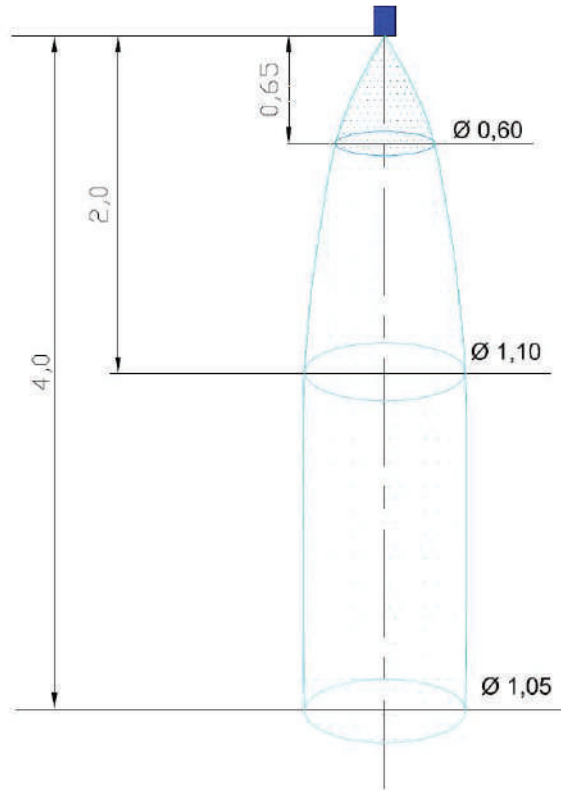


NCSFH 11.1.2

TECHNICAL PARAMETERS

Total flow surface	: 3.7 mm
Basic extinguishing media	: Water, gas and water (ROTOR)
Net filter opening	: 0.4 x 0.4 mm
Connection size	: " BSP ext.
Inlet pressure	: 6 - 16 bar
Number of orifice pairs	: 4
Head weight	: 0.2 kg
Protection cap	: Silicon cap Cat. No. - NA003 SS cap Cat. No. - NA001

TECHNICAL DETAILS


ROTOR MIST SYSTEM - MIST STREAM

ROTOR MIST SYSTEM - MIST STREAM PARAMETERS

Initial pressure of work [bar]	: 15
Droplet size D_v [μm]	: 40 - 70
The minimum distance required to develop a stream of water mist [m]	: 0.3
Effective stream range *** [m]	: 2.1

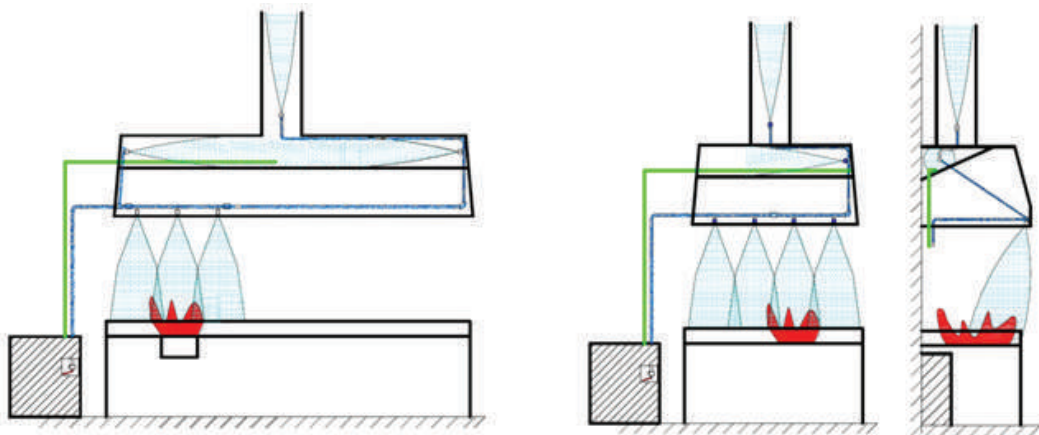
*May vary $\pm 5\%$. | **Range of horizontal stream | ***Measurement in 30 second of action.

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

Operating Principle

In case of an automatic or manual actuation of the detection system, the supply unit begins to feed the medium into the fire extinguishing section. The rotors installed in cylinders produce a mixture of water and nitrogen, which flows in a rotor manner. It then flows out of the cylinder, through the manifold, into the main system pipe and further, via the pipeline, into the heads located under the hood. The nozzles generate a flow of mist, which covers the entire area.

The mist ejected from the nozzle forms a shape similar to a cone, whereas the joined streams create a mist curtain. The large area of dispersed Watermist enables fast and very efficient transfer of heat from the site being on fire. The collection of heat by the evaporating mist forms the basis of the system's fire extinguishing efficiency. The heads placed behind the filters and in the ventilation duct supply the extinguishing mist, which simultaneously cuts off the oxygen supply and cools the protected areas.



Advantages of the Watermist Kitchen Suppression System



Elimination of post-fire losses caused due to flooding or usage of chemical extinguishing agents.



Highly efficient at putting out fires.



Fast distribution of mist due to high kinetic energy of the jet.



Minimal water consumption.



No risk of cracks in construction, housings and steel components.



No thermal shock.



Safe for people and property due to low pressure of water and gas.



The Watermist Kitchen Suppression System has been designed to protect any type of professional cooker used in restaurants, canteens, large catering areas, industrial kitchens, and on ships and yachts. Owing to the special ability of Watermist to fight Class A, B and F fires, the system can also be employed to protect small and large fryers, fried food stands and similar food processing equipment.

CUSTOMIZED SOLUTIONS



First, our Safety Consultants will visit your premises and help you calculate the length of the kitchen hood you wish to protect.



Depending on the dimensions, a customized design is made.



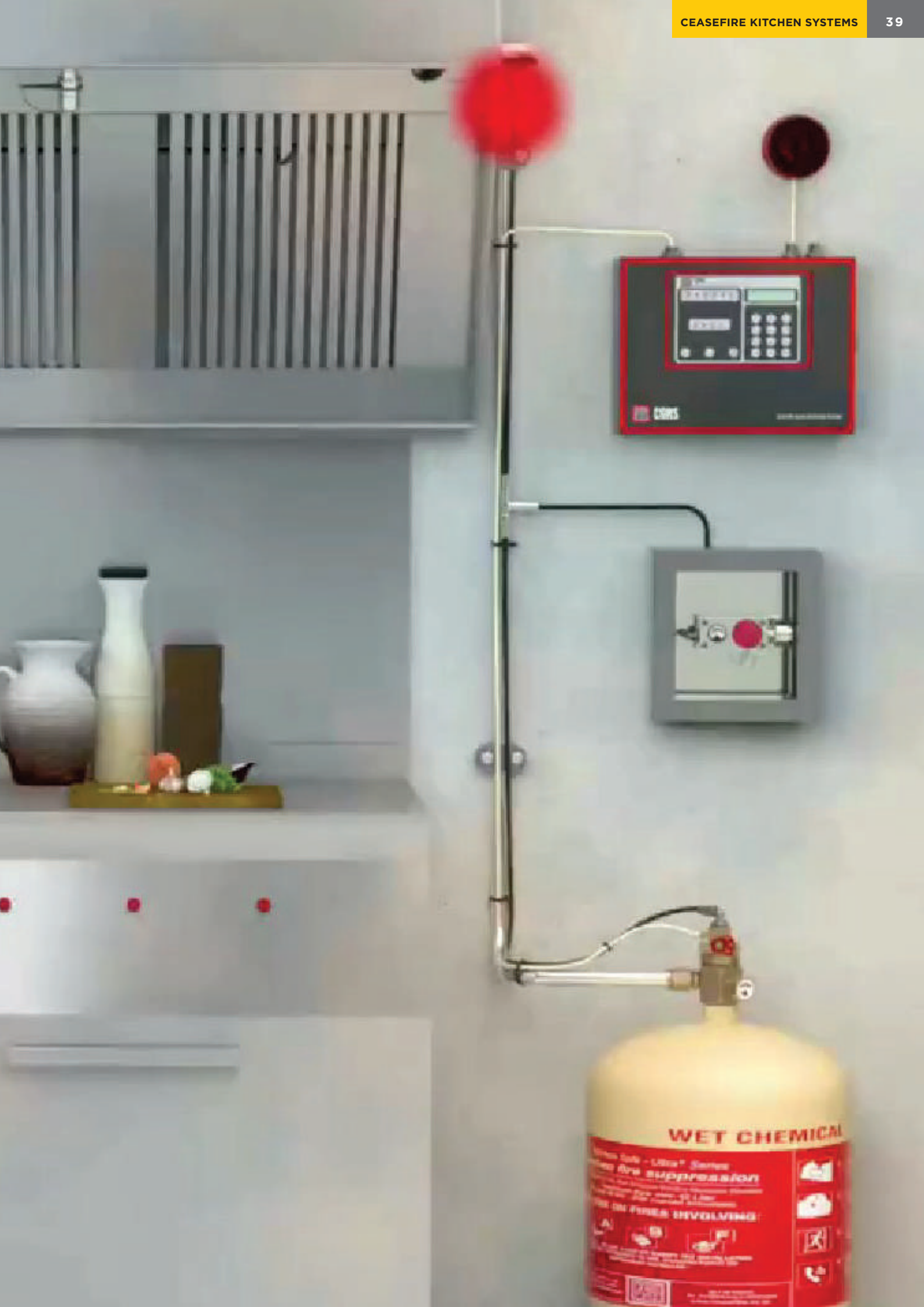
Finally, the Installation Team oversees installation and testing.



Post installation, Ceasefire's Specialised Services Division maintains and services the system.



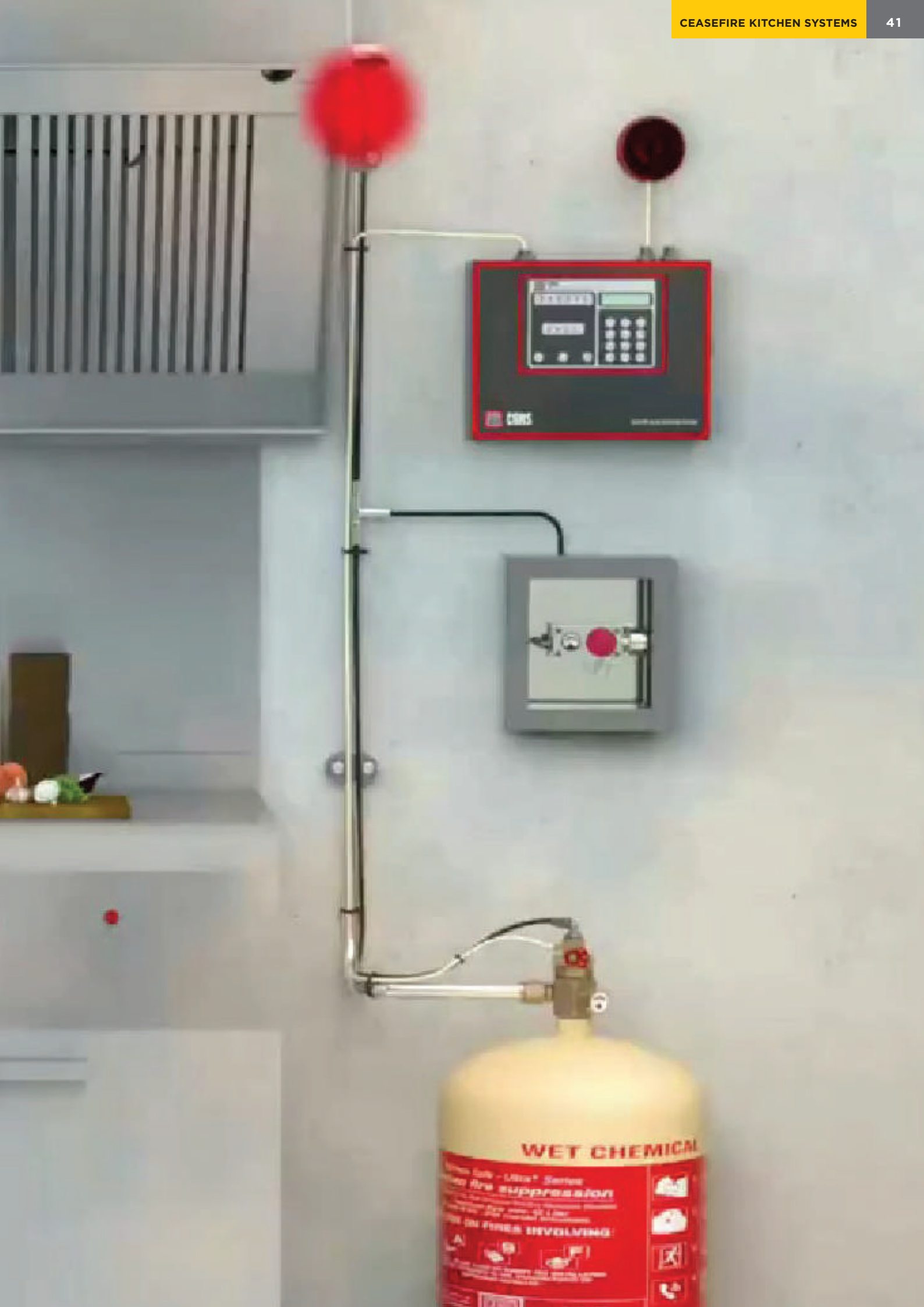
The big advantage here is that the variant you choose will have a fixed price. Any further costs involved in customising the system or adding components will be taken care of by us, giving you complete peace of mind.



The logo consists of the words "CEASE" and "FIRE" stacked vertically in a bold, sans-serif font, enclosed within a square border.The text "SMART RANGE" is displayed in a bold, sans-serif font. Behind the text is a faint, dotted map of the United Kingdom.

WET CHEMICAL BASED KITCHEN SUPPRESSION SYSTEM





ULTRA PLUS SERIES / ENGINEERED

WET CHEMICAL BASED KITCHEN SUPPRESSION SYSTEM

**CERTIFIED BY LPCB TO
LPS 1223 STANDARD**



Hazardous oil and grease fires in kitchens take place due to overheating of oil in the temperature range of 350°C - 380°C. Fires are further enhanced by the accumulation of oil deposits in the enclosure behind the filter and the exhaust ducts of the kitchen hood over time due to cooking activities.

Several reasons can be attributed to kitchen fires, from temporary distraction by the user to

complete absence of attention to cooking appliances and vessels during cooking to malfunctioning of automated temperature control equipment in electrical deep fat fryers.

This is where the Ceasefire Wet Chemical Kitchen Suppression System comes in. This automated kitchen fire suppression system detects and kills a fire, even when no one is around.



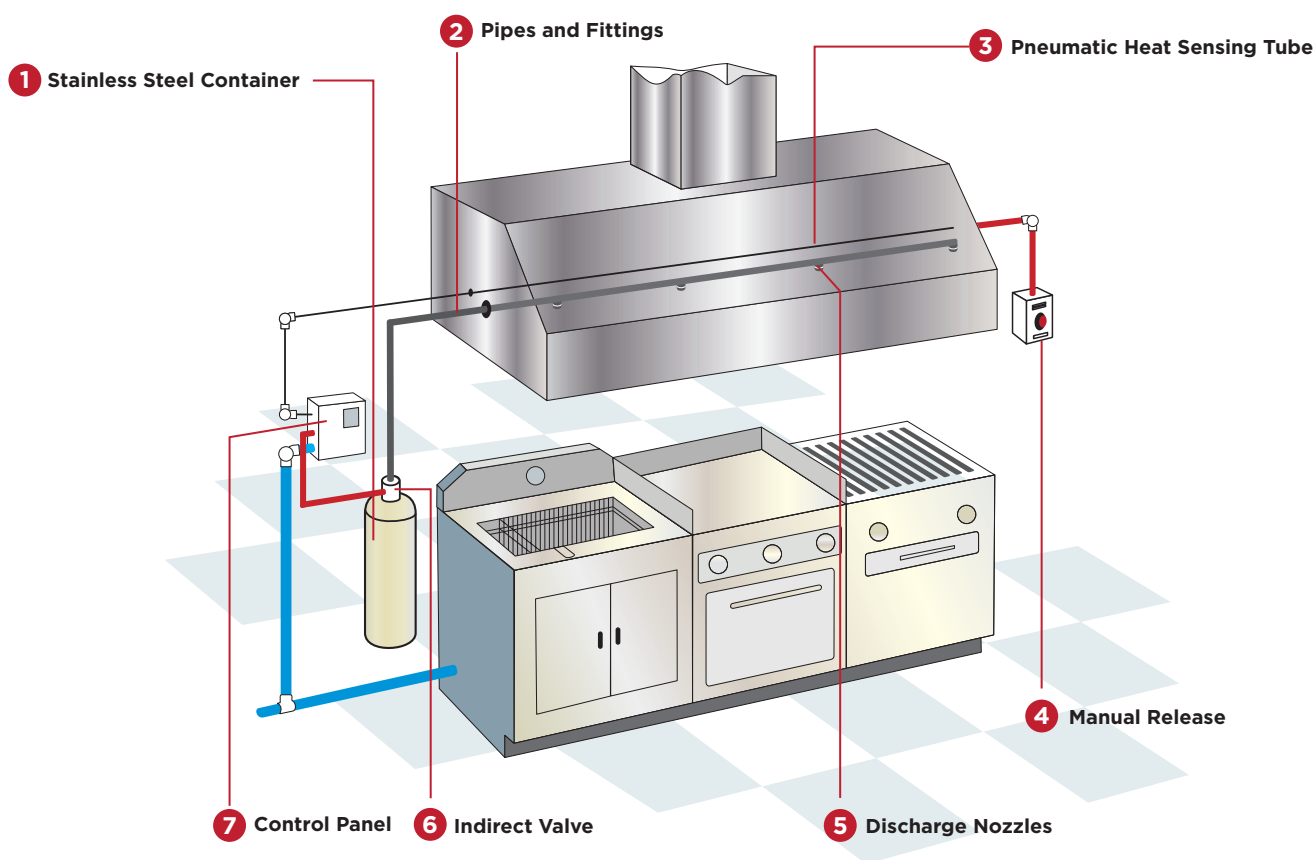
How The System Protects

The Wet Chemical based Kitchen Suppression System incorporates both manual and automatic protection by a pneumatic detection and actuation technique.

All sensitive areas susceptible to fire such as fire due to overheated cooking oil in vessels/deep fat fryer and oil residual deposits in the extraction system of kitchen hoods are covered by a pressurised heat sensing tube. The heat sensing tube is connected to the head of the indirect low

pressure valve mounted on the top of pressurised agent container.

In case of fire, the heat sensing tube punctures at a pre-determined temperature, releasing the pressure of the tube and activating the indirect valve. The extinguishing agent thus released is spread through distribution piping from the nozzle provided to cover the kitchen hood, vessels, plenum and duct.

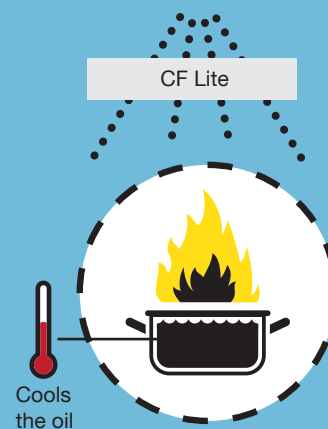


How The Agent Works

The extinguishing chemical is a wet chemical based foaming agent named CF lite. CF lite is a highly concentrated formulation of the extinguishing agent that makes it effective against Class A, B and kitchen fires.

In contrast to normal Class B fires where temperatures in the range of 350°C-380°C are observed only in the burned fuel or their vapour, the oil used in cooking is itself at this high temperature.

The extinguishing agent has a blanketing effect on the flames, which cools the oil to below its self-ignition point, thereby killing fire..












CEASEFIRE'S WET CHEMICAL BASED KITCHEN SUPPRESSION SYSTEM GIVES YOU MORE:

- LPCB Certified System
- No flooding-related collateral damage
- Fights Class A, B and F (cooking oil) fires
- Its heat-sensitive tube offers superior uniform protection as compared to conventional Point Detector-based Systems
- Available in 11.5 liters, 18 liters, 27 liters and 44 liters



Features of the Wet Chemical Based Kitchen Suppression System

	24-hour Protection - Automatic detection and actuation controls ensure fire protection is always 'up'.
	Stored Pressure Technology - Stainless steel containers hold the wet chemical under stored pressure. This not only ensures instant activation, but also provides the convenience of checking the readiness of the system by the mere observation of the pressure gauge. If the needle is in the green zone, the system is ready for action
	Multiple Triggers - The system can be triggered either by the manual actuation system or the automatic detection system.
	Highly Effective - Wet Chemical prevents re-ignition by cooling down the temperature of the heated oil.
	Unobtrusive Design - Flexible piping configurations allow for a streamlined design and convenient installation that won't interfere with kitchen workflow.

	Highly Flexible - Ceasefire's Kitchen Suppression System's flexible configuration and design can easily accommodate changes to the layout of appliances or the expansion of the cooking area.
	Highly Reliable - A fully assembled and 100% tested Mechanical Control Head ensures reliable operation. Pressure gauges on the steel cylinders mark the gas levels, allowing maintenance staff to replenish it whenever required. Protective chrome nozzle covers keep the nozzles free of contamination and blockages caused by grease or other cooking by-products.
	LPCB Certified System
	4 Variants - Available in four variants - 11.5 liters, 18 liters, 27 liters and 44 liters.

Wet Chemical Based Kitchen Suppression System Components

1. AGENT CONTAINER

The size and content of the stainless steel cylindrical agent containers depend upon the number of nozzles selected. Agent containers are available in four sizes:

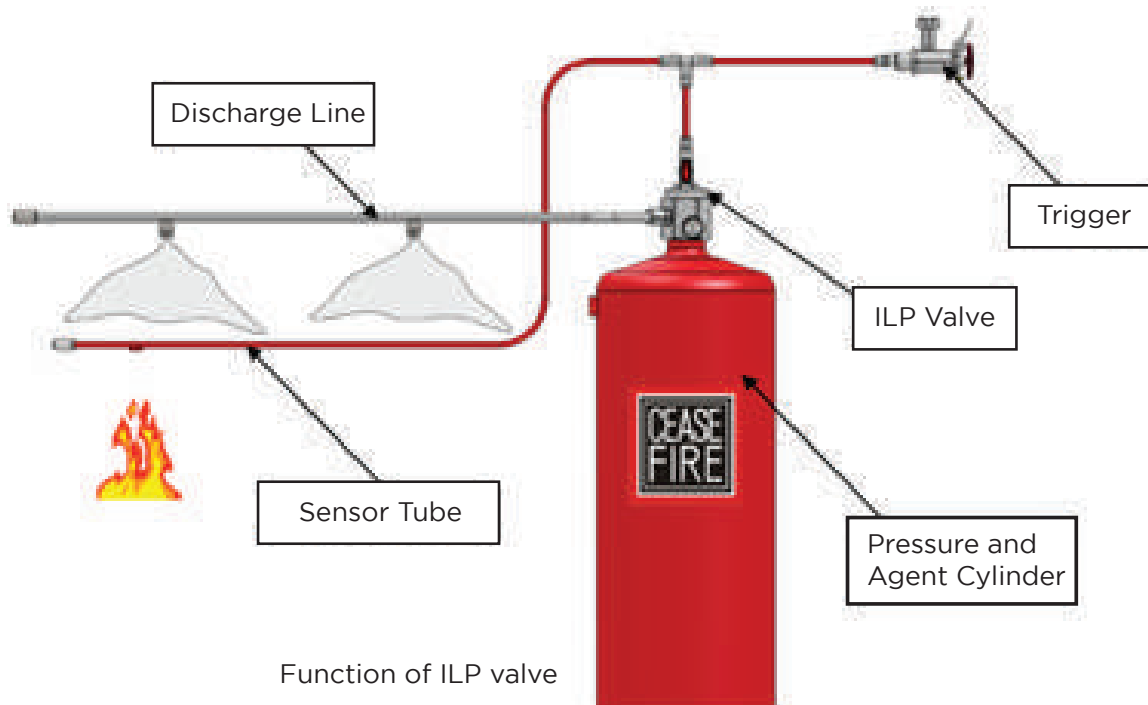
11.5 liters capacity | **18 liters capacity** | **27 liters capacity** | **44 liters capacity**

The agent volume has been selected by the number of nozzles estimated to 1.5 liters per nozzle discharge.

2. CYLINDER VALVE

This ILP valve is the main component of an indirectly working extinguishing system in connection to the Ceasefire heat sensing tube. If the sensor detects a fire, the valve is triggered and expels the extinguishing agent from the pressure vessel through a separate

discharge line. The valve reacts to a drop in pressure inside the heat sensing tube and opens the valve outlet. Because of the indirect function principle, the system may also be triggered and activated manually or electromagnetically.



3. EXTINGUISHING AGENT



Developed after extensive research by Ceasefire, the extinguishing agent has a significant influence not only on the extinguishing result (especially in the case of grease fires) but also on factors such as the corrosive behaviour and performance.

CF Lite is a concentrated class F or Class K fire fighting wet chemical based extinguishing agent. This powerful agent fights all types of kitchen hood fire effectively.

The powerful agent brings down the agent quantity requirement to 1.5 ltr per nozzle making the system more efficient.

Using CF Lite a larger hood area can be protected using the same agent cylinder size because it supports more number of nozzles with the same quantity of agent.

4. CEASEFIRE HEAT SENSING TUBE

In the Wet Chemical Kitchen Suppression System, the standard fire detection device is the Ceasefire heat sensing tube. Ceasefire's heat sensing tubes are made of high-tech plastic and were developed especially for the installation and application in automatic fire extinguishing systems.

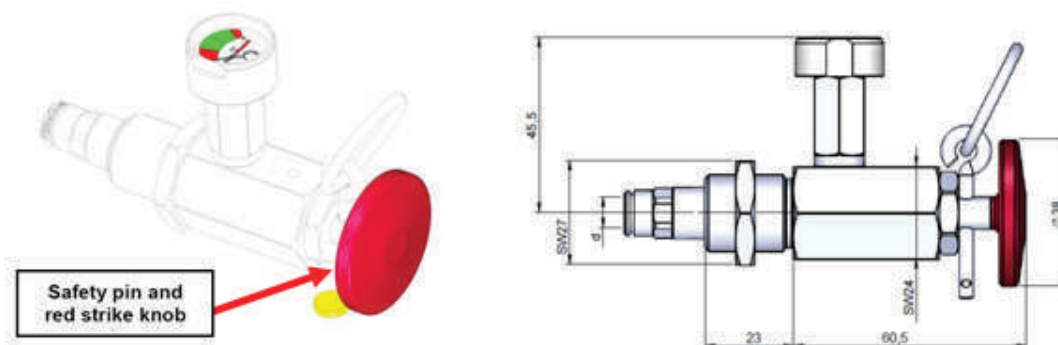
The prescribed operating pressure is applied to the heat sensing tube after the proper installation. Due to the thermal material properties and the inner over-pressure, the heat sensing tube will burst when touched by a flame or subjected to an excessive heat increase, and therefore functions as a reliable detector in the case of a fire.



5. MANUAL ACTUATOR

Manual triggers are installed in or at the end of the detection line and simulate a burst of the heat sensing tube when actuated. The drop of pressure thus generated will trigger the valve.

To actuate the manual trigger, pull the safety pin and press the red strike knob.

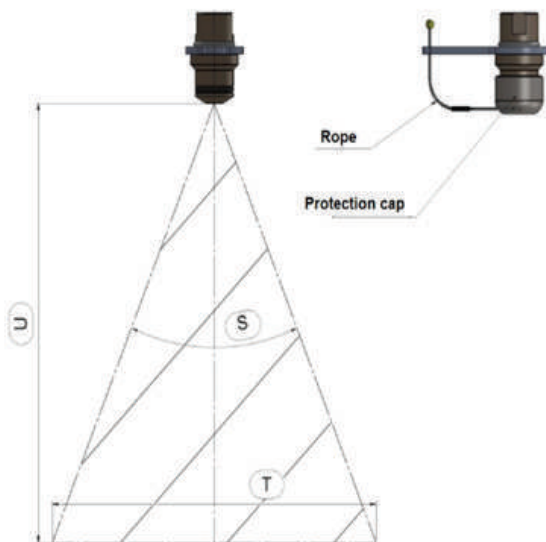


The installation of a manual trigger is mandatory.

6. EXTINGUISHING NOZZLES

The number of nozzles needed for a system depends on the circumstances and the type of equipment in the kitchen.

Full cone nozzle 40° | **Full cone nozzle 15°**



The nozzles are protected against the intrusion of dirt and grease by protection caps. However, the nozzles must be kept absolutely clear of dirt and obstructions during installation. When the system is activated, the protection caps are blown off and do not impede the dispersal of the extinguishing agent.

The nozzles must be selected according to the local circumstances (hood length) and aligned accordingly.

7. PIPES, FITTINGS

Stainless steel pipe of **10 mm diameter** (inner diameter of 8 mm) with compression fittings are used.

8. AUTOMATIC FIRE DETECTION

Each Ceasefire kitchen fire extinguishing system is fitted with a pneumatic heat sensing tube as a fire detector. In the event of a fire, the tube will react to the increasing heat and burst. The resulting pressure drop activates the cylinder valve (**ILP**) and the extinguishing agent is expelled through the extinguishing line.



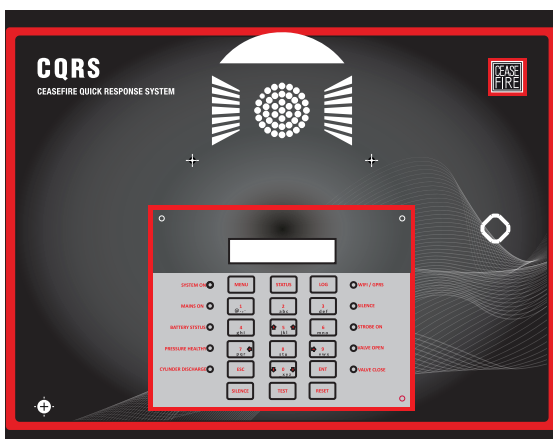
9. MANUAL SYSTEM ACTUATION



In case the kitchen personnel or someone else detects a fire before the sensor hose has reacted, he or she can trigger the activation manually. There are two manual actuation options available. The silver safety pin must be pulled, and the red strike knob must be pushed deeply and firmly. These triggers are mounted at the end or in line with the sensor hose.

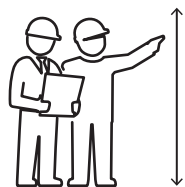
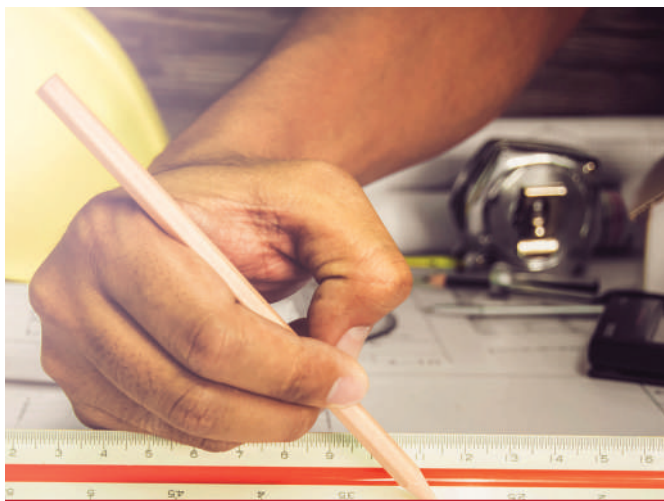
10. OPTIONAL CONTROL PANEL

The Control Panel not only helps monitor the readiness of your kitchen suppression system, which ensures that you're not left high and dry in an emergency situation, but also raises the alarm.



- **Activates alarm**
- **Compatible with third party systems**
- **Helps check the readiness of your kitchen suppression system**

CUSTOMIZED SOLUTIONS



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Depending on the dimensions, a customized design is made.



Finally, the Installation Team oversees installation and testing.



Post installation, Ceasefire's Specialised Services Division maintains and services the system.

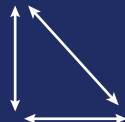


The big advantage here is that the variant you choose will have a fixed price. Any further costs involved in customising the system or adding components will be taken care of by us, giving you complete peace of mind.



SMART RANGE

TECHNICAL SPECIFICATIONS





ENVIRO SERIES

WATERMIST BASED KITCHEN SUPPRESSION SYSTEM

TECHNICAL SPECIFICATIONS

Product Code	UOM	CF-001067	CF-001068	CF-001068A
Description	—	Water Mist Kitchen suppression system Enviro -27 Ltr	Water Mist Kitchen suppression system Enviro -56 Ltr	Water Mist Kitchen suppression system Enviro -56 Ltr Double Cylinder
Capacity of Agent	L	19.5	40	40
Certification	—	PED UKCA-PED LPS 1223-LPCB	PED UKCA-PED LPS 1223-LPCB	PED UKCA-PED LPS 1223-LPCB1223-LPCB
Diameter of Shell	MM	300	350	350
Total Height (approx.)	MM	666.5	882.5	882.5
MOC of Shell	—	Stainless steel	Stainless steel	Stainless steel
Min. Wall Thickness	MM	1.8	2	2
Test Pressure	BAR	35	35	35
Anti-Corrosive Treatment	—	Outersurfaces are EP Powder coated having Thickness 50 Micron Min. RAL Shade 3000	Outersurfaces are EP Powder coated having Thickness 50 Micron Min. RAL Shade 3000	Outersurfaces are EP Powder coated having Thickness 50 Micron Min. RAL Shade 3000
Service Pressure	BAR	Min. 17bar -23.7 bar Max.	Min. 17bar -23.7 bar Max.	Min. 17bar -23.7 bar Max.
Type of Operating Mechanism	—	Automatic/Manual	Automatic/Manual	Automatic/Manual
Type of Pressure Gauge	—	Magnetic Bourdon Tube Type	Magnetic Bourdon Tube Type	Magnetic Bourdon Tube Type
Type of valve	—	Indirect Low Pressure Valve (ILP) with two outlet	Indirect Low Pressure Valve (ILP) with two outlet	Indirect Low Pressure Valve (ILP) with two outlet
Min. Discharge Time	SEC.	30	30	30
Fire Rating	—	A IB	A IB	A IVB
Operating Temperature Range	°C	0°C to +65°C	0°C to +65°C	0°C to +65°C
Applicable to Type of Fire	—	Class A, B & Electrical Started Fire	Class A, B & Electrical Started Fire	Class A, B & Electrical Started Fire
Packing Size Length X Width X Height	MM	300 X 300 X 600	290 X 290 X 1030	290 X 290 X 1030
Product Warranty	YEAR	1	1	1



ULTRA SERIES

WET CHEMICAL KITCHEN SUPPRESSION SYSTEM

TECHNICAL SPECIFICATIONS

Product Code	UOM	CF-000669C	CF-000669A	CF-000669B
Description	—	Ceasefire Kitchen Safe-Ultra Series Wet Chemical suppression system -11.5 Litre	Ceasefire Kitchen Safe-Ultra Series Wet Chemical suppression system-18 Litre	Ceasefire Kitchen Safe-Ultra Series Wet Chemical suppression system -27 Litre
Capacity of Agent	L	8	12	20
Certification	—	a) PED 2014/68/EU,ANNEX III (MODULE H) b) LPS 1223 ISSUE 2.3 c) ISO 9001	a) PED 2014/68/EU,ANNEX III (MODULE H) b) LPS 1223 ISSUE 2.3 c) ISO 9001	a) PED 2014/68/EU,ANNEX III (MODULE H) b) LPS 1223 ISSUE 2.3 c) ISO 9001
Total Height (approx.)	MM	652.5	436	571
Service Pressure	BAR	Min. 17 bar -23.7 bar Max.	Min. 17 bar -23.7 bar Max.	Min. 17 bar -23.7 bar Max.
Test Pressure	BAR	35	35	35
No of Max. nozzles	—	4	6	10
Operating Temperature Range	°C	5 to +65	5 to +65	5 to +65
Min. Discharge Time	SEC.	30 to 50	30 to 50	30 to 50
Anti Corrosive Treatment	—	Outer surfaces are Epoxy polyester Powder coated having Minimum Thickness 50 Micron. Colour : Ivory	Outer surfaces are Epoxy polyester Powder coated having Minimum Thickness 50 Micron. Colour : Ivory	Outer surfaces are Epoxy polyester Powder coated having Minimum Thickness 50 Micron. Colour : Ivory
Applicable to Type of Fire	—	Class A, B ,F & Electrical Started Fire	Class A, B ,F & Electrical Started Fire	Class A, B ,F & Electrical Started Fire
Filled Weight (Approx.)	KGS	17.85	25.4	37.9
Product Warranty	YEAR	1	1	1

Shell/Container

MOC of Shell	—	Stainless steel.	Stainless steel.	Stainless steel.
Dia of Shell	MM	175	300	300
Mini. Wall Thickness	MM	1.5	1.8	1.8

TECHNICAL SPECIFICATIONS

Product Code	UOM	CF-000669C	CF-000669A	CF-000669B
Valve				
Type of valve	—	Indirect Low Pressure Valve (ILP) with two outlet	Indirect Low Pressure Valve (ILP) with two outlet	Indirect Low Pressure Valve (ILP) with two outlet
MOC of valve	—	Brass Nickle Plating	Brass Nickle Plating	Brass Nickle Plating
Type of Operating Mechanism	—	Automatic/Manual	Automatic/Manual	Automatic/Manual
Valve outlet thread	"	G1/4" (2x)	G1/4" (2x)	G1/4" (2x)
Vessel Connection thread	MM	M30 x 1.5mm	M30 x 1.5mm	M30 x 1.5mm
Dip tube Connection thread	MM	M16 x 1.5mm	M16 x 1.5mm	M16 x 1.5mm
Pressure gauge Connection thread	MM	M10 x 1	M10 x 1	M10 x 1
Outer diameter heat sensing tube	MM	Ø6mm	Ø6mm	Ø6mm
Burst disc	—	Optional	Optional	Optional
Pressure gauge				
Type of Pressure Gauge	—	Magnetic Bourdon Tube Type	Magnetic Bourdon Tube Type	Magnetic Bourdon Tube Type
Type of Pressure Gauge	—	brass or nickel plated	brass or nickel plated	brass or nickel plated
Pipe				
Delivery Pipe MOC	—	SS304	SS304	SS304
Delivery Pipe Dimension	MM	OD 10mm ID 8mm.	OD 10mm ID 8mm.	OD 10mm ID 8mm.
Fitting				
MOC of Fitting	—	SS316	SS316	SS316
Fitting Size	MM	10mm ID 8mm	10mm ID 8mm	10mm ID 8mm

TECHNICAL SPECIFICATIONS

Product Code	UOM	CF-000669C	CF-000669C	CF-000669C
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Nozzle

MOC of Nozzles	—	SS316	SS316	SS316
Nozzles Type-Size	°X	Spray type 40° / 60° Full Cone	Spray type 40° / 60° Full Cone	Spray type 40° / 60° Full Cone

Detection

MOC of Heat Sensing Tube	—	Multi-layered Modified Polyamide	Multi-layered Modified Polyamide	Multi-layered Modified Polyamide
Heat Sensing Tube Size	MM	OD: 6mm ID: 4mm	OD: 6mm ID: 4mm	OD: 6mm ID: 4mm
Burst Pressure	BAR	(Approx.)120 bar at 20° C	(Approx.)120 bar at 20° C	(Approx.)120 bar at 20° C
Certificate	—	UL -521 Certified, Tested As per Requirements of LPS1223 Issue 2.3	UL -521 Certified, Tested As per Requirements of LPS1223 Issue 2.3	UL -521 Certified, Tested As per Requirements of LPS1223 Issue 2.3
Protection	—	UV-Protected	UV-Protected	UV-Protected

Connectors

MOC of Connector	—	SS316	SS316	SS316
Size of Tee Connector	MM	6 mm	6 mm	6 mm
Size of Elbow Connector	MM	6 mm	6 mm	6 mm

Manual Actuator

MOC of Manual Actuator	—	SS316	SS316	SS316
HST Connection	MM	Ø6mm	Ø6mm	Ø6mm
Pressure Gauge type	—	Magnetic Bourdon Tube Type	Magnetic Bourdon Tube Type	Magnetic Bourdon Tube Type
MOC of Pressure Gauge	—	Brass or nickel plated	Brass or nickel plated	Brass or nickel plated
Burst disc	—	Yes	Yes	Yes

TECHNICAL SPECIFICATIONS

Product Code	UOM	CF-000669CCC	CF-000669AAA	CF-000669BBB	CF-000669DDD
Description	—	Ceasefire Kitchen Safe-Ultra Series Wet Chemical suppression system-11.5 Litre	Ceasefire Kitchen Safe-Ultra Series Wet Chemical suppression system-18 Litre	Ceasefire Kitchen Safe-Ultra Series Wet Chemical suppression system-27 Litre	Ceasefire Kitchen Safe-Ultra Series Wet Chemical suppression system-44 Litre
Capacity of Agent	L	9	14.5	22.5	30
Certification	—	a) PED 2014/68/EU,ANNEX III (MODULE H) b) LPS 1223 ISSUE 2.3 c) ISO 9001		a) PED 2014/68/EU,ANNEX III (MODULE H) b) LPS 1223 ISSUE 2.3 c) ISO 9001	
Total Height (approx.)	MM	652.5	436	571	547
Service Pressure	BAR	Min. 17 bar -23.7 bar Max.	Min. 17 bar -23.7 bar Max.	Min. 17 bar -23.7 bar Max.	Min. 17 bar -23.7 bar Max.
Test Pressure	BAR	35	35	35	35
No of Max. nozzles	—	6	10	15	20
Operating Temperature Range	°C	5 to +65	5 to +65	5 to +65	5 to +65
Min. Discharge Time	SEC.	30 to 50	30 to 50	30 to 50	30 to 50
Anti Corrosive Treatment	—	Outer surfaces are Epoxy polyester Powder coated having Minimum Thickness 50 Micron. Colour : Ivory		Outer surfaces are Epoxy polyester Powder coated having Minimum Thickness 50 Micron. Colour : Ivory	
Applicable to Type of Fire	—	Class A, B ,F & Electrical Started Fire	Class A, B ,F & Electrical Started Fire	Class A, B ,F & Electrical Started Fire	Class A, B ,F & Electrical Started Fire
Filled Weight (Approx.)	KGS	18.85	27.9	39.9	43.6
Product Warranty	YEAR	1	1	1	1

Shell/Container

MOC of Shell	—	Stainless steel.	Stainless steel.	Stainless steel.	Stainless steel.
Dia of Shell	MM	175	300	300	400
Mini. Wall Thickness	MM	1.5	1.8	1.8	2

TECHNICAL SPECIFICATIONS

Product Code	UOM	CF-000669CCC	CF-000669AAA	CF-000669BBB	CF-000669DDD
Valve					
Type of valve	—	Indirect Low Pressure Valve (ILP) with two outlet	Indirect Low Pressure Valve (ILP) with two outlet	Indirect Low Pressure Valve (ILP) with two outlet	Indirect Low Pressure Valve (ILP) with two outlet
MOC of valve	—	Brass Nickle Plating	Brass Nickle Plating	Brass Nickle Plating	Brass Nickle Plating
Type of Operating Mechanism	—	Automatic/Manual	Automatic/Manual	Automatic/Manual	Automatic/Manual
Valve outlet thread	"	G1/4" (2x)	G1/4" (2x)	G1/4" (2x)	G1/4" (2x)
Vessel Connection thread	MM	M30 x 1.5mm	M30 x 1.5mm	M30 x 1.5mm	M30 x 1.5mm
Dip tube Connection thread	MM	M16 x 1.5mm	M16 x 1.5mm	M16 x 1.5mm	M16 x 1.5mm
Pressure gauge Connection thread	MM	M10 x 1	M10 x 1	M10 x 1	M10 x 1
Outer diameter heat sensing tube	MM	Ø6mm	Ø6mm	Ø6mm	Ø6mm
Burst disc	—	Optional	Optional	Optional	Optional
Pressure gauge					
Type of Pressure Gauge	—	Magnetic Bourdon Tube Type	Magnetic Bourdon Tube Type	Magnetic Bourdon Tube Type	Magnetic Bourdon Tube Type
Type of Pressure Gauge	—	brass or nickel plated	brass or nickel plated	brass or nickel plated	brass or nickel plated
Pipe					
Delivery Pipe MOC	—	SS304	SS304	SS304	SS304
Delivery Pipe Dimension	MM	OD 10mm ID 8mm.	OD 10mm ID 8mm.	OD 10mm ID 8mm.	OD 10mm ID 8mm.
Fitting					
MOC of Fitting	—	SS316	SS316	SS316	SS316
Fitting Size	MM	10mm ID 8mm	10mm ID 8mm	10mm ID 8mm	10mm ID 8mm

TECHNICAL SPECIFICATIONS

Product Code	UOM	CF-000669CCC	CF-000669AAA	CF-000669BBB	CF-000669DDD
Nozzle					
MOC of Nozzles	—	SS316	SS316	SS316	SS316
Nozzles Type-Size	°X	Spray type 40° / 60° Full Cone	Spray type 40° / 60° Full Cone	Spray type 40° / 60° Full Cone	Spray type 40° / 60° Full Cone
Detection					
MOC of Heat Sensing Tube	—	Multi-layered Modified Polyamide	Multi-layered Modified Polyamide	Multi-layered Modified Polyamide	Multi-layered Modified Polyamide
Heat Sensing Tube Size	MM	OD: 6mm ID: 4mm	OD: 6mm ID: 4mm	OD: 6mm ID: 4mm	OD: 6mm ID: 4mm
Burst Pressure	BAR	(Approx.)120 bar at 20° C	(Approx.)120 bar at 20° C	(Approx.)120 bar at 20° C	(Approx.)120 bar at 20° C
Certificate	—	UL -521 Certified, Tested As per Requirements of LPS1223 Issue 2.3	UL -521 Certified, Tested As per Requirements of LPS1223 Issue 2.3	UL -521 Certified, Tested As per Requirements of LPS1223 Issue 2.3	UL -521 Certified, Tested As per Requirements of LPS1223 Issue 2.3
Protection	—	UV-Protected	UV-Protected	UV-Protected	UV-Protected
Connectors					
MOC of Connector	—	SS316	SS316	SS316	SS316
Size of Tee Connector	MM	6 mm	6 mm	6 mm	6 mm
Size of Elbow Connector	MM	6 mm	6 mm	6 mm	6 mm
Manual Actuator					
MOC of Manual Actuator	—	SS316	SS316	SS316	SS316
HST Connection	MM	Ø6mm	Ø6mm	Ø6mm	Ø6mm
Pressure Gauge type	—	Magnetic Bourdon Tube Type	Magnetic Bourdon Tube Type	Magnetic Bourdon Tube Type	Magnetic Bourdon Tube Type
MOC of Pressure Gauge	—	Brass or nickel plated	Brass or nickel plated	Brass or nickel plated	Brass or nickel plated
Burst disc	—	Yes	Yes	Yes	Yes

Optional Control Panel

This 4 Channel Quick Response System Controller integrates 4 cylinder monitoring and control functions. This system comes with a front display and keypad option which allows programming and viewing options at the panel.









OPERATING FEATURES

The Control Panel not only helps monitor the readiness of your kitchen suppression system, which ensures that you're not left high and dry in an emergency situation, but also raises the alarm.

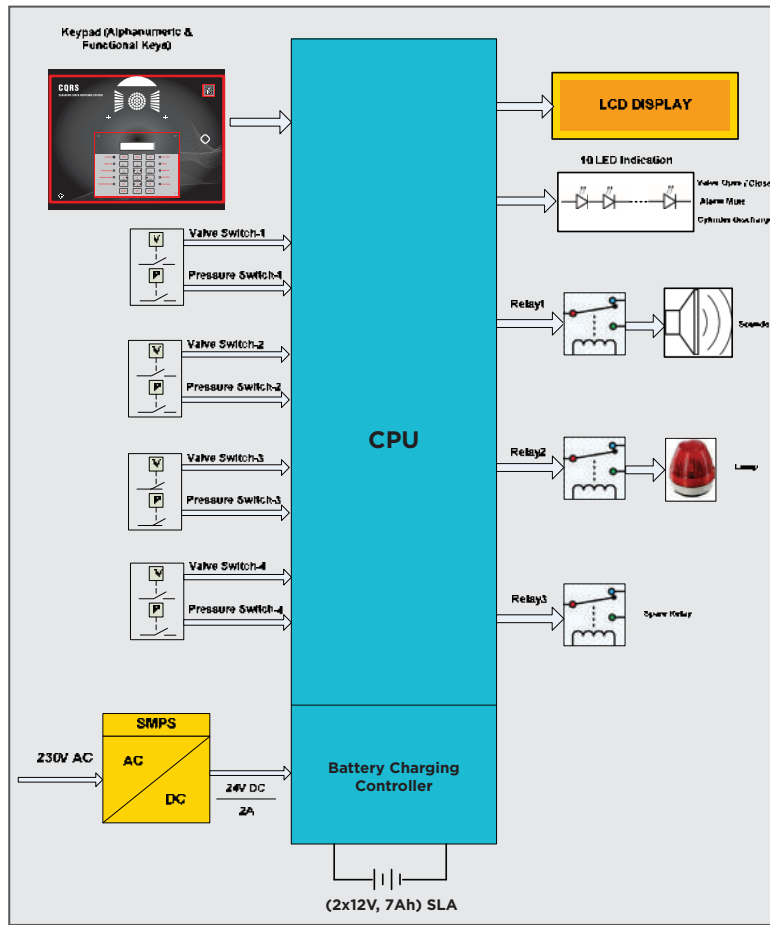


- 4 Cylinders' Valve and Pressure Switch Status Monitoring.
- Wide Operating Voltage SMPS with 150-300V Range.
- User-friendly Interface with LCD Display.
- Programmable sense delay timing for sounder and relay activation maximum up to 5 sec.
- Relay outputs for Hooter and Lamp indication on detection of fire.

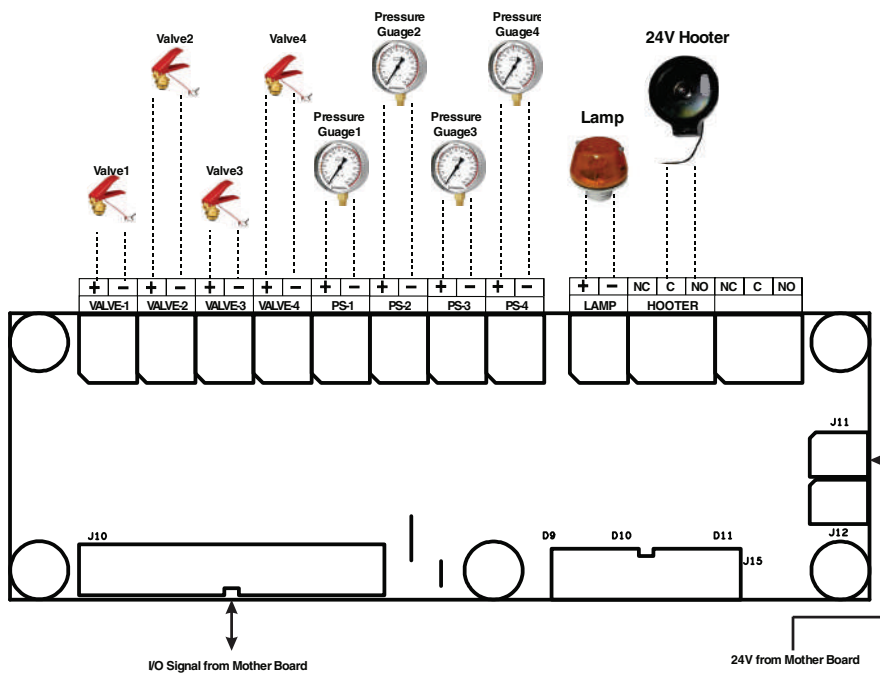
KEY FUNCTIONS

 RESET	RESET : The reset key resets faulty conditions. The cylinder valve open/close conditions reset. The pressure switch open does not have an auto reset, it resets by pressing the reset key.	 8 TUV	DOWN ARROW: The setup menu display can be scrolled up by pressing this key. Also switching on the unit by pressing this key continuously for 10 seconds resets the password to default factory settings.
 TEST	TEST : Pressing this key ensures diagnosis of the system.	 2 ABC	UP ARROW: The setup menu display can be scrolled up by pressing this key. Also, the state of AC supply and battery will be displayed on the screen.
 ALARM MUTE	ALARM MUTE : Whenever a fault or fire occurs, the alarm relay turns ON . Silencing the alarm/hooter can be done by pressing this key.	 6 MNO	RIGHT ARROW: To scroll the cursor to the right along with the shift key.
MENU ENTER	MENU/ ENTER : User/operator can enter into the setup menu by pressing this key.	 4 GHI	LEFT ARROW: To scroll the cursor to the left along with the shift key.
1 Ecs	ESC: To exit to the main screen, press ESC key.		
 SHIFT	SHIFT : Shift + left/right arrow key pressed together enables the shifting of the cursor respectively, so as to edit parameter values.		

SYSTEM BLOCK DIAGRAM



WIRING DIAGRAM

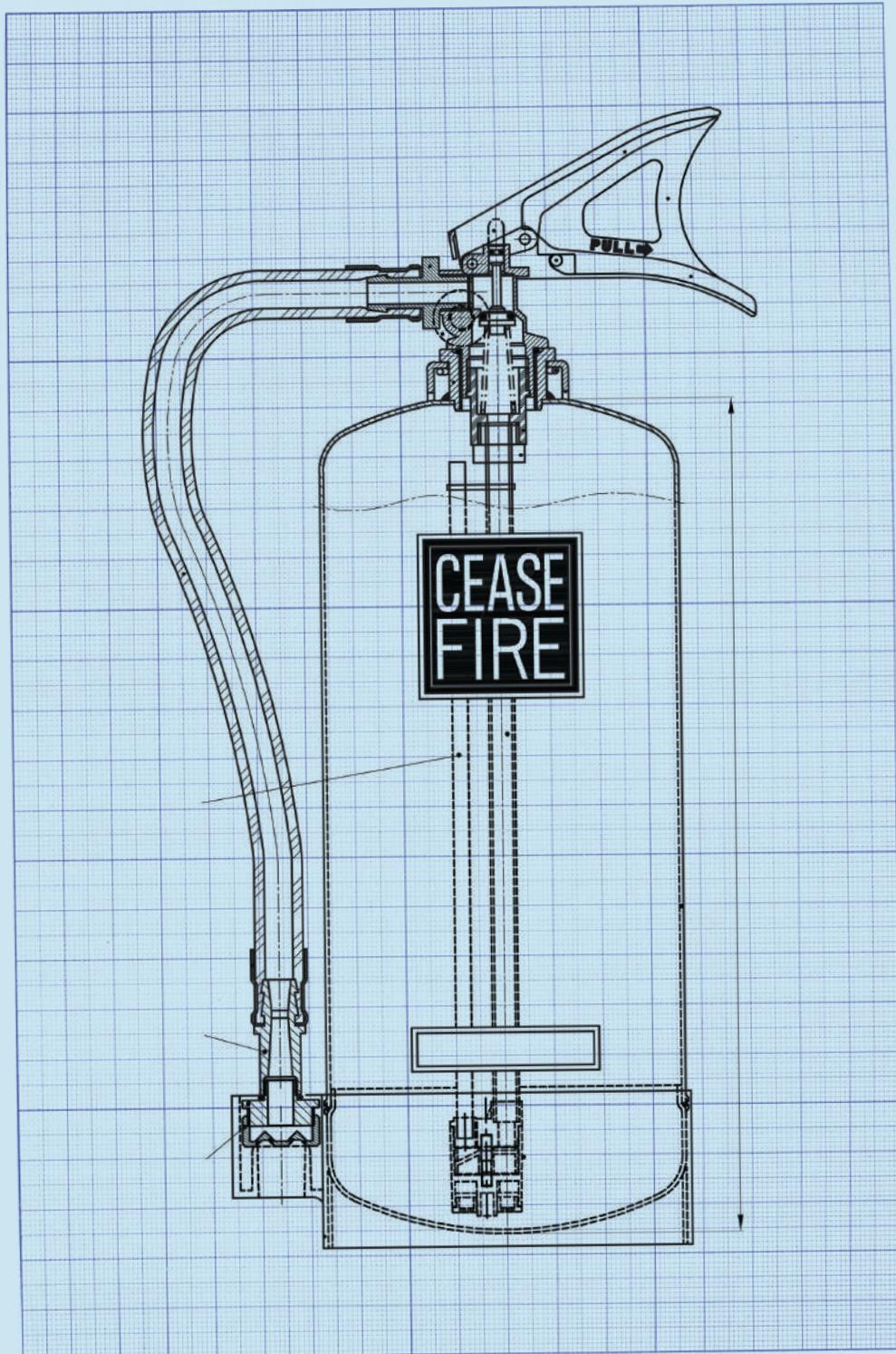




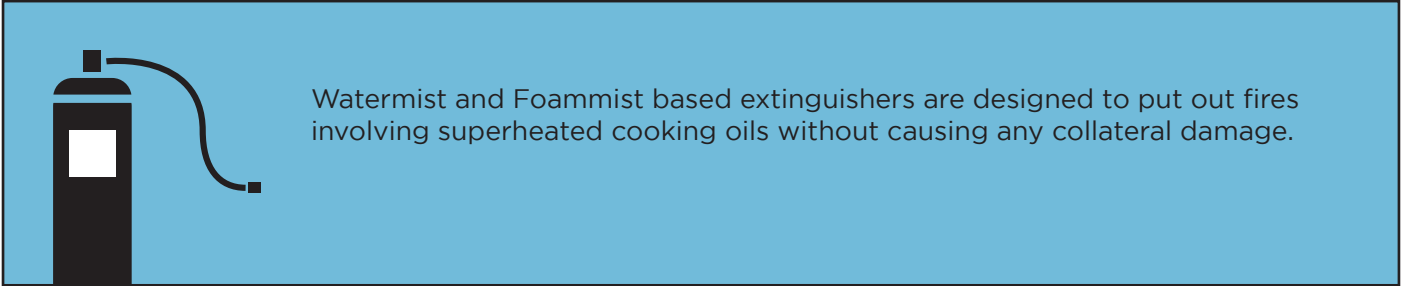
SMART RANGE

PORTABLE EXTINGUISHERS









WATERMIST & FOAMMIST BASED PORTABLE EXTINGUISHERS

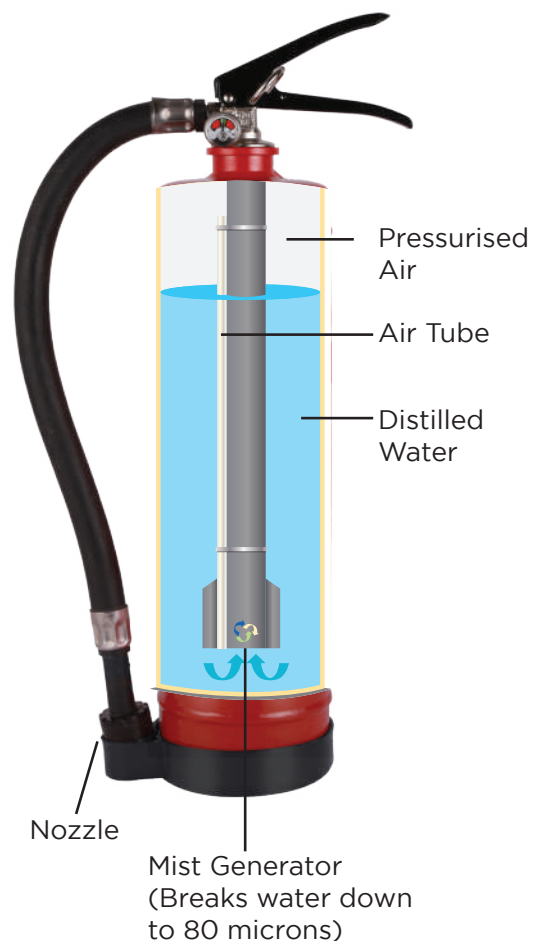


Watermist based portable extinguisher for kitchens is adept in handling all types of kitchen fires. Once triggered, a specially designed rotary within the mist generator mixes air and water in a pre-set proportion to generate Watermist. The mist is then propelled at the fire through the specially designed nozzle, and has a throw of 10 feet. The mist quickly blankets the flames and brings down the temperature to below combustion levels.

The foammist variant has a foam additive that blankets the flames and cuts off the oxygen supply killing the fire instantly.

This is perfect for every stage of the food chain: production, storage, transportation and distribution.

FEATURES	
	Stainless Steel Body - No corrosion; and can handle high temperatures.
	Can be used on Class F Fires - Fights Class A, B and F (oil) fires.
	No Collateral Damage - The watermist based extinguisher uses distilled water & converts it into a fine mist, ensuring no damage.
	Watermist Available in four variants - 2 liters, 3 liters, 6 liters and 9 liters. Foammist Available in two variants - 2 liters and 6 liters.



TECHNICAL SPECIFICATIONS:

Nomenclature	Fire Ext Water Mist 2L SS SP Red	Fire Ext Water Mist 3L SS SP Red	Fire Ext Water Mist 6L SS SP Red	Fire Ext Water Mist 9L SS SP Red
Stored Pressure/Cartridge	Stored Pressure	Stored Pressure	Stored Pressure	Stored Pressure
Agent	Water	Water	Water	Water
Throw (min.)	3 meters	3 meters	3 meters	3 meters
Product Code	CF-001118	CF-001240	CF-001119	CF-001120
BIS	Yes	Yes	Yes	Yes
LPCB	Yes	No	Yes	Yes
Kitemark	Yes	No	Yes	Yes
PED	Yes	Yes	Yes	Yes
Gross Weight (approx.)	4.55 kg	5.9 kg	10.6 kg	14.6 kg
Net Mass (approx.)	2 Ltr	3 Ltr	6 Ltr	9 Ltr
Height of Fire Ext.(approx)	485 mm	445 mm	575 mm	690 mm
Discharge Mechanism	Squeeze Grip	Squeeze Grip	Squeeze Grip	Squeeze Grip
IS 15683 Fire Ratings	1A 25F	2A 25F	3A 75F	4A 75F
EN-3 Fire Ratings	5A 25F	—	13A 75F	21A 75F
Can Construction	Drawn Rolled & MIG Welded	Drawn Rolled & MIG Welded	Drawn Rolled & MIG Welded	Drawn Rolled & MIG Welded
Valve/Cap Construction	Forging & Machining	Forging & Machining	Forging & Machining	Forging & Machining
External Coating	Epoxy Polyester Powder	Epoxy Polyester Powder	Epoxy Polyester Powder	Epoxy Polyester Powder
Warranty in Years	6	6	6	6
Working Pressure	15 Bar	15 Bar	15 Bar	15 Bar
Dia. of Shell (OD)	140 mm	175 mm	175 mm	175 mm
Operating Temperature	+5°C to +60°C	+5°C to +60°C	+5°C to +60°C	+5°C to +60°C
Hydrostatic Test Pressure	35 Bar	35 Bar	35 Bar	35 Bar
Body Thickness	1.5 mm	1.5 mm	1.5 mm	1.5 mm
Schraeder Valve	Yes	Yes	Yes	Yes
Pressure relief valve	Yes	Yes	Yes	Yes








WET CHEMICAL BASED PORTABLE EXTINGUISHERS

Ceasefire's wet chemical based fire extinguishers are specially designed to fight oil fires in kitchens. When set against a fire, the specialised foam extinguishing agent in these extinguishers smothers the fire by cutting off the oxygen supply and bringing the surrounding temperature to below combustion levels within seconds. Being a de-greasing substance, the extinguishing agent ensures that the kitchen can be cleaned easily post a fire. Besides, the wet chemical foam is over 99% biodegradable, making these extinguishers safe for the environment.



FEATURES

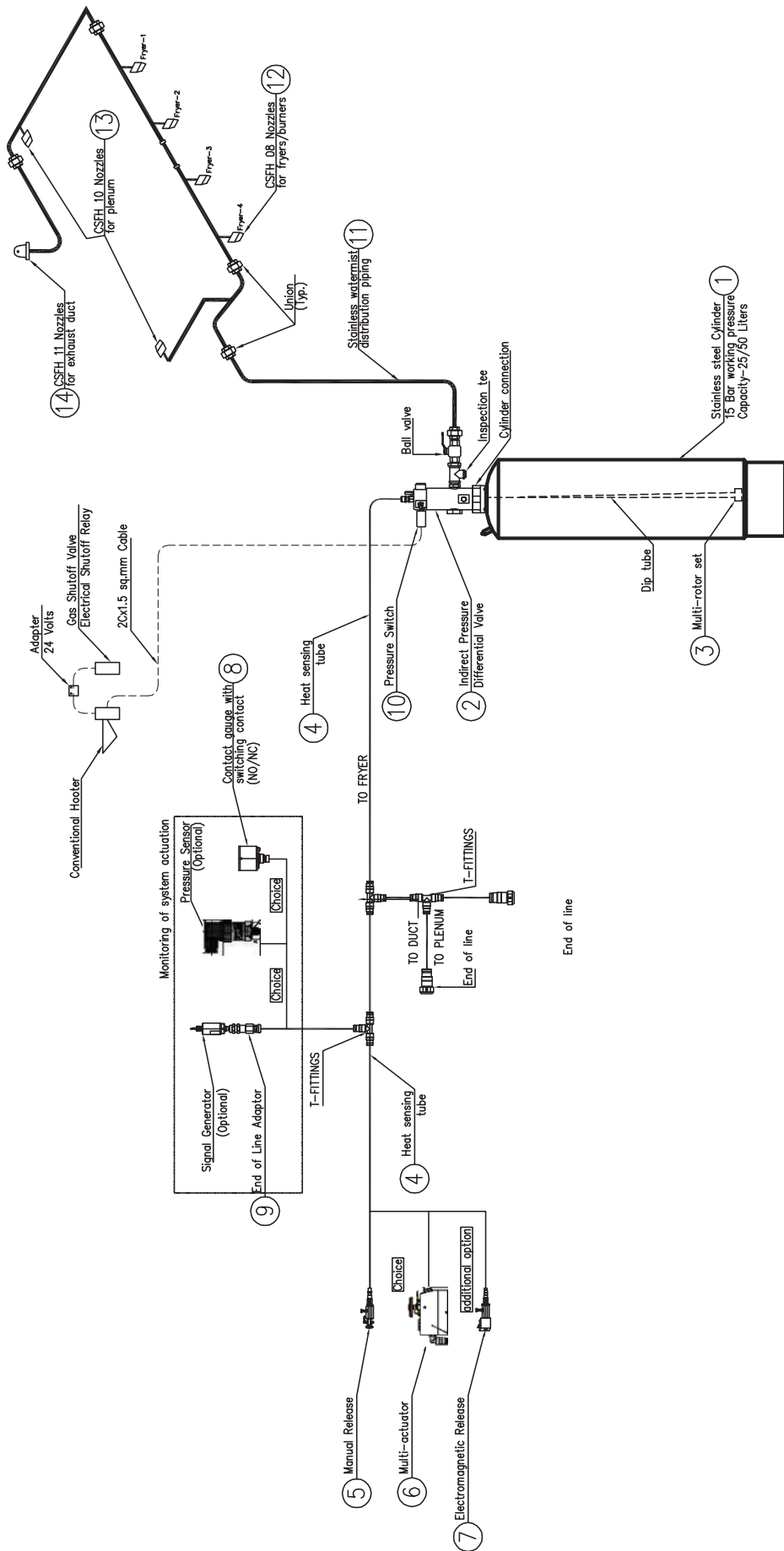
	Stainless Steel Body - No corrosion; and can handle high temperatures.
	Can be used on Class F Fires - Fights Class A, B and F (cooking oil) fires.
	Prevents re-ignition - The Wet Chemical-based extinguisher is highly effective as it prevents re-ignition.
	Controllable discharge mechanism - A simple squeeze grip activation mechanism allows you to control the discharge of the extinguishing agent.
	Three variants - Available in three variants - 3 liters, 6 liters and 9 liters.

TECHNICAL SPECIFICATIONS:

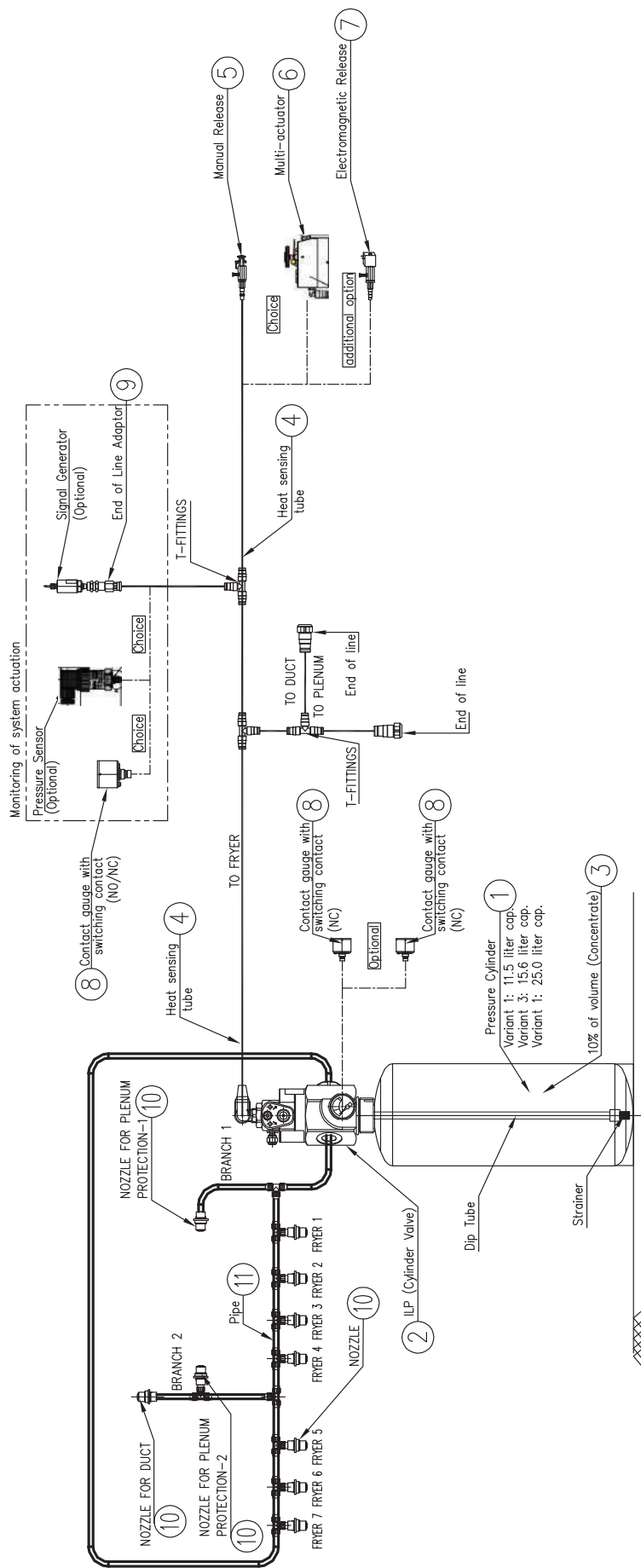
Nomenclature	Fire Ext Wet Chemical 3L MS SP Red	Fire Ext Wet Chemical 3L SS SP Red	Fire Ext Wet Chemical 6L MS SP Red	Fire Ext Wet Chemical 6L SS SP Red	Fire Ext Wet Chemical 9L MS SP Red	Fire Ext Wet Chemical 9L SS SP Red
Stored Pressure/Cartridge	Stored Pressure	Stored Pressure	Stored Pressure	Stored Pressure	Stored Pressure	Stored Pressure
Agent	KV Lite 100% Class K Foam	KV Lite 100% Class K Foam	KV Lite 100% Class K Foam	KV Lite 100% Class K Foam	KV Lite 100% Class K Foam	KV Lite 100% Class K Foam
Throw (min.)	3 meters	3 meters	3 meters	3 meters	3 meters	3 meters
Product Code	CF-001243	CF-001242	CF-001135	CF-001133	CF-001136	CF-001134
BIS	Yes	Yes	Yes	Yes	Yes	Yes
LPCB	No	No	Yes	Yes	No	No
Kitemark	No	No	Yes	Yes	No	No
PED	Yes	Yes	Yes	Yes	Yes	Yes
Gross Weight (approx.)	6.3 kg	7.1 kg	11.35 kg	12.25 kg	16.9 kg	17.4 kg
Net Mass (approx.)	3 Ltr	3 Ltr	6 Ltr	6 Ltr	9 Ltr	9 Ltr
Height of Fire Ext.(approx)	435 mm	435 mm	520 mm	520 mm	615 mm	610 mm
Discharge Mechanism	Squeeze Grip	Squeeze Grip	Squeeze Grip	Squeeze Grip	Squeeze Grip	Squeeze Grip
Nozzle	Aspirating	Aspirating	Aspirating	Aspirating	Aspirating	Aspirating
IS 15683 Fire Ratings	2A 25F	2A 25F	3A 75F	3A 75F	—	—
EN-3 Fire Ratings	—	—	13A 75F	13A 75F	21A 75F	21A 75F
Can Construction	Drawn Rolled & MIG Welded	Drawn Rolled & MIG Welded	Deep Drawn & MIG Welded	Drawn Rolled & MIG Welded	Deep Drawn & MIG Welded	Drawn Rolled & MIG Welded
Valve/Cap Construction	Forging & Machining	Forging & Machining	Forging & Machining	Forging & Machining	Forging & Machining	Forging & Machining
External Coating	Epoxy Polyester Powder	Epoxy Polyester Powder	Epoxy Polyester Powder	Epoxy Polyester Powder	Epoxy Polyester Powder	Epoxy Polyester Powder
Warranty in Years	6	6	6	6	6	6
Working Pressure	15 Bar	15 Bar	15 Bar	15 Bar	15 Bar	15 Bar
Dia. of Shell (OD)	140 mm	140 mm	160 mm	160 mm	175 mm	175 mm
Operating Temperature	+5°C to +60°C	+5°C to +60°C	+5°C to +60°C	+5°C to +60°C	+5°C to +60°C	+5°C to +60°C
Hydrostatic Test Pressure	35 Bar	35 Bar	35 Bar	35 Bar	35 Bar	35 Bar
Body Thickness	1.2 mm	1.5 mm	1.4 mm	1.5 mm	1.4 mm	1.5 mm
Schraeder Valve	Yes	Yes	Yes	Yes	Yes	Yes
Pressure relief valve	Yes	Yes	Yes	Yes	Yes	Yes



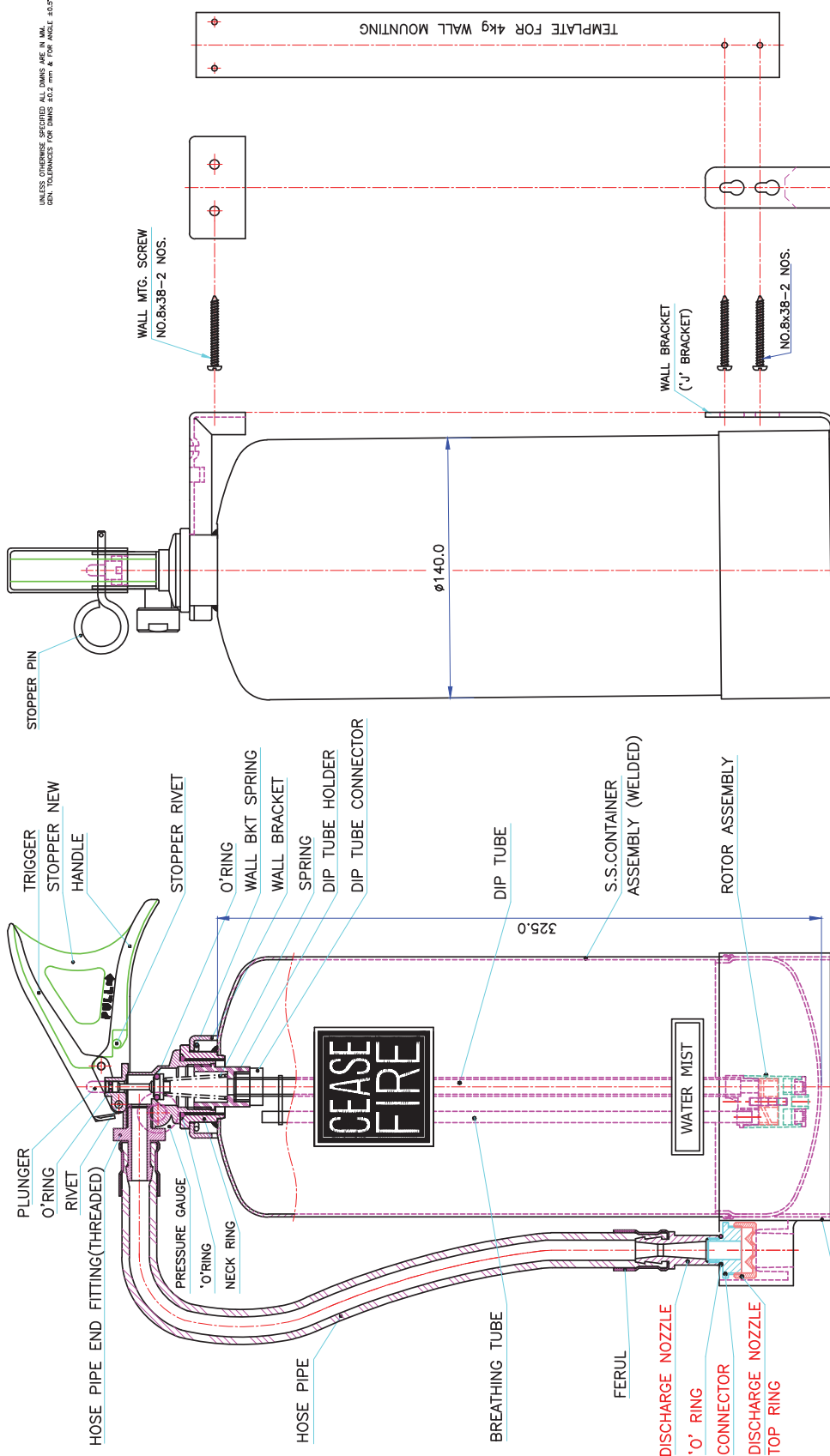
THE WATERMIST KITCHEN SUPPRESSION SYSTEM



THE WET CHEMICAL KITCHEN SUPPRESSION SYSTEM



WATERMIST-BASED PORTABLE EXTINGUISHERS 2 Ltr.



UNLESS OTHERWISE SPECIFIED ALL DIMS ARE IN MM.
GEN. TOLERANCES FOR DIMS ±0.2 mm & FOR ANGLE ±0.5°

2 Ltr. WATER MIST

R.H.S.VIEW

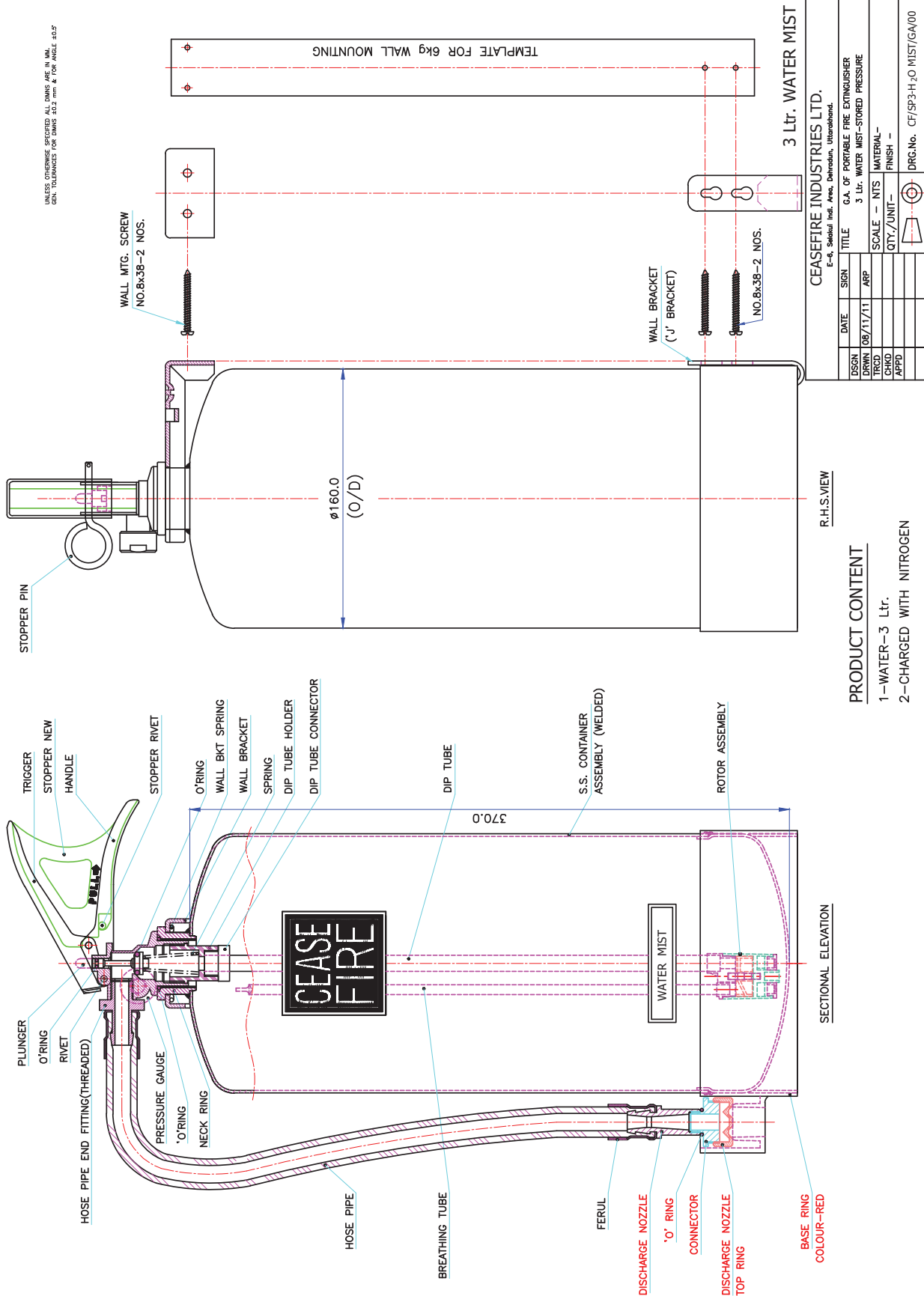
CEASEFIRE INDUSTRIES LTD. E-6, Saket Indl. Area, Dehradun, Uttarakhand	
DATE	SIGN
DRWN 10/11/11	ARP
TRCD	
CHKD	
APPD	
TITLE	G.A. OF PORTABLE FIRE EXTINGUISHER
	2 Ltr. WATER MIST-STORED PRESSURE
SCALE - NTS	MATERIAL -
QTY./UNIT -	FINISH -
	DRG.No. CF/SP2-H ₂ O MIST/GA/00

PRODUCT CONTENT

- 1-WATER - 2 Ltr.
- 2-CHARGED WITH NITROGEN

ELEVATION (PARTIAL SECTION)

WATERMIST-BASED PORTABLE EXTINGUISHERS 3 Ltr.



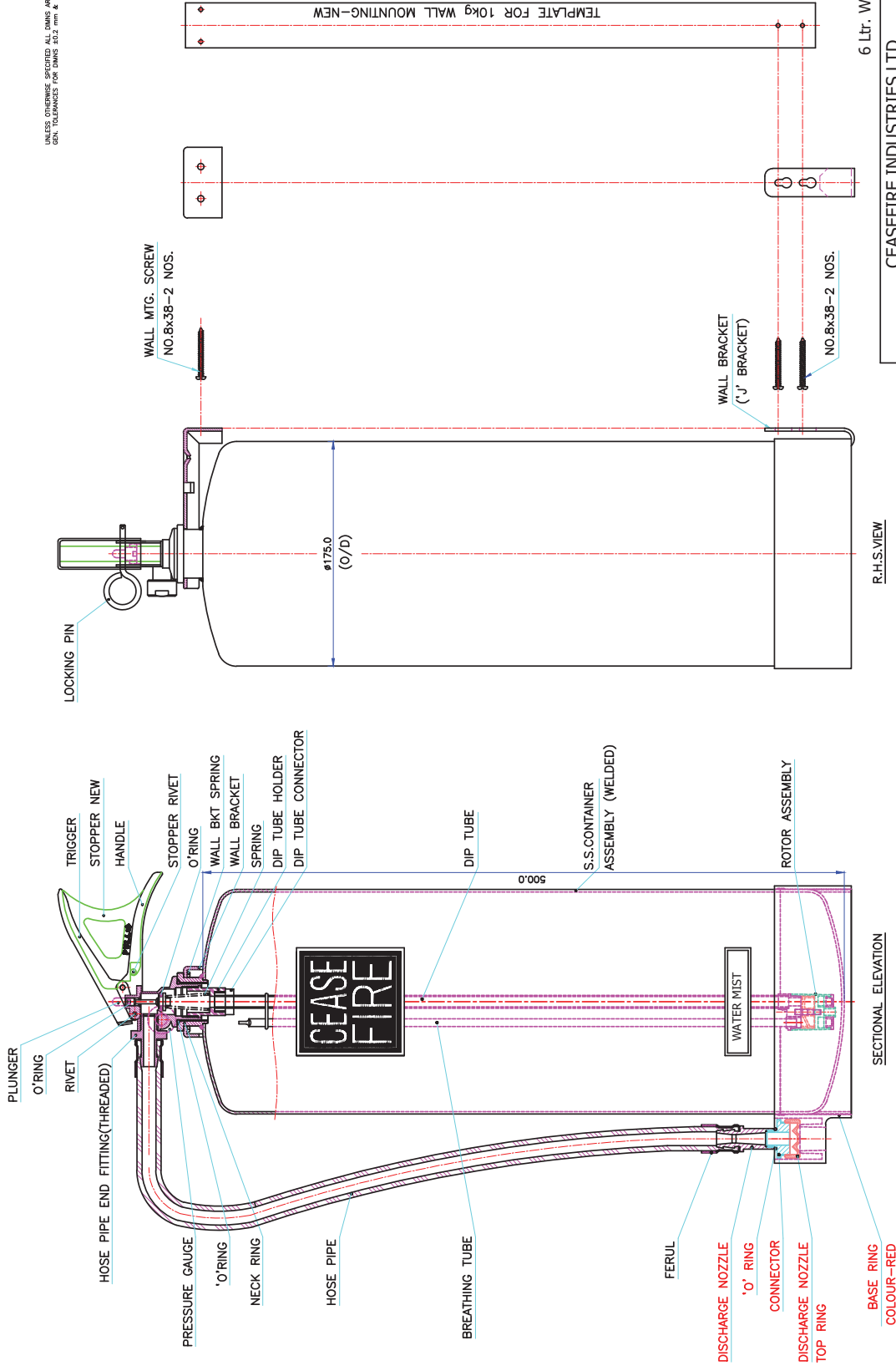
PRODUCT CONTENT
 1 - WATER - 3 Ltr.
 2 - CHARGED WITH NITROGEN

DATE	SIGN	TITLE	G.A. OF PORTABLE FIRE EXTINGUISHER
08/11/11	ARP	3 Ltr. WATER MIST-STORED PRESSURE	
DRWN		SCALE - NTS	MATERIAL-
TRCD		QTY./UNIT-	FINISH -
CHKD			
APPD			
			DRG.No. CF/SP3-H ₂ O MIST/GA/00

CEASEFIRE INDUSTRIES LTD.
 E-6, Sakal Ind. Area, Dehradun, Uttarakhand.

WATERMIST-BASED PORTABLE EXTINGUISHERS 6 Ltr.

UNLESS OTHERWISE SPECIFIED ALL DIMS ARE IN MM.
GEN. TOLERANCES FOR DIMS ±0.2 mm & FOR ANGLE ±0.5°



6 Ltr. WATER MIST

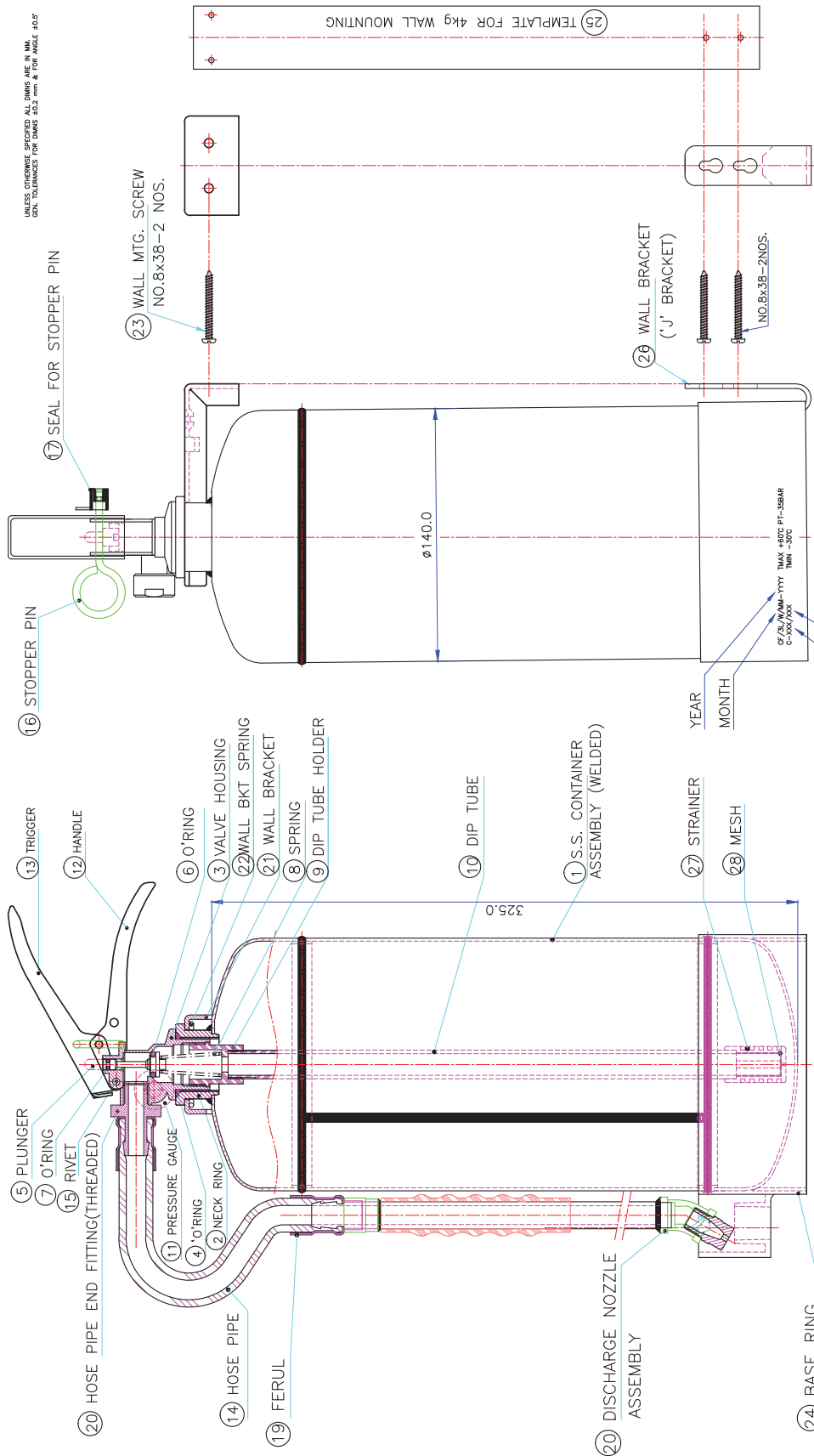
R.H.S.VIEW

SIGN		TITLE	
E-6, Sakdai Ind. Area, Dehradun, Uttarakhand.		G.A. OF PORTABLE FIRE EXTINGUISHER	
DATE	10/11/11	DRWN	ARP
6 Ltr. WATER MIST-STORED PRESSURE		TRGD	
SCALE - NTS		MATERIAL -	
QTY./UNIT -		FINISH -	
DRG.No. CF/SP6-H ₂ O MIST/GA/00			

PRODUCT CONTENT

- 1 - WATER - 6 Ltr.
- 2 - CHARGED WITH NITROGEN

WET CHEMICAL-BASED PORTABLE EXTINGUISHERS 3 Ltr.



DATE		SIGN	G.A. OF PORTABLE FIRE EXTINGUISHER	
DRWN 29/12/15		ARP	3 Ltr. WET CHEMICAL-STORED PRESSURE	
TRCD			SCALE - NTS	
CHKD			MATERIAL -	
APPD			FINISH -	
			DRG.No. CF/SP-WC3/GA/00	

CEASEFIRE INDUSTRIES LTD.
E-6, Seelbail Indst. Area, Dehradun, Uttarakhand

PRODUCT CONTENT

- 1-WET CHEMICAL-3 Ltr.
- 2-CHARGED WITH NITROGEN

NOTE:-

- 1-FOR PART LIST REFER DOC. NO. CF/PL/SP-WC3/00
- 2-MARKING ENGRAVED ON FOOT RING OF CONTAINER

R.H.S.VIEW

ELEVATION (PARTIAL SECTION)

BATCH NUMBER

SERIAL NUMBER

YEAR

MONTH

MAX +60°C PT-35BAR
MIN -50°C

CF/PL/WM-3 Ltr. C-300/302

Ø140.0

325.0

25) TEMPLATE FOR 4kg WALL MOUNTING

23) WALL MTG. SCREW NO. 8x38-2 NOS.

17) SEAL FOR STOPPER PIN

16) STOPPER PIN

29) WALL BRACKET ('J' BRACKET)

NO. 8x38-2 NOS.

20) DISCHARGE NOZZLE ASSEMBLY

24) BASE RING

19) FERUL

14) HOSE PIPE

11) PRESSURE GAUGE

4) 1" O'RING

2) NECK RING

7) O'RING

15) RIVET (THREADED)

5) PLUNGER

13) TRIGGER

12) HANDLE

6) O'RING

3) VALVE HOUSING

22) WALL BKT SPRING

21) WALL BRACKET

8) SPRING

9) DIP TUBE HOLDER

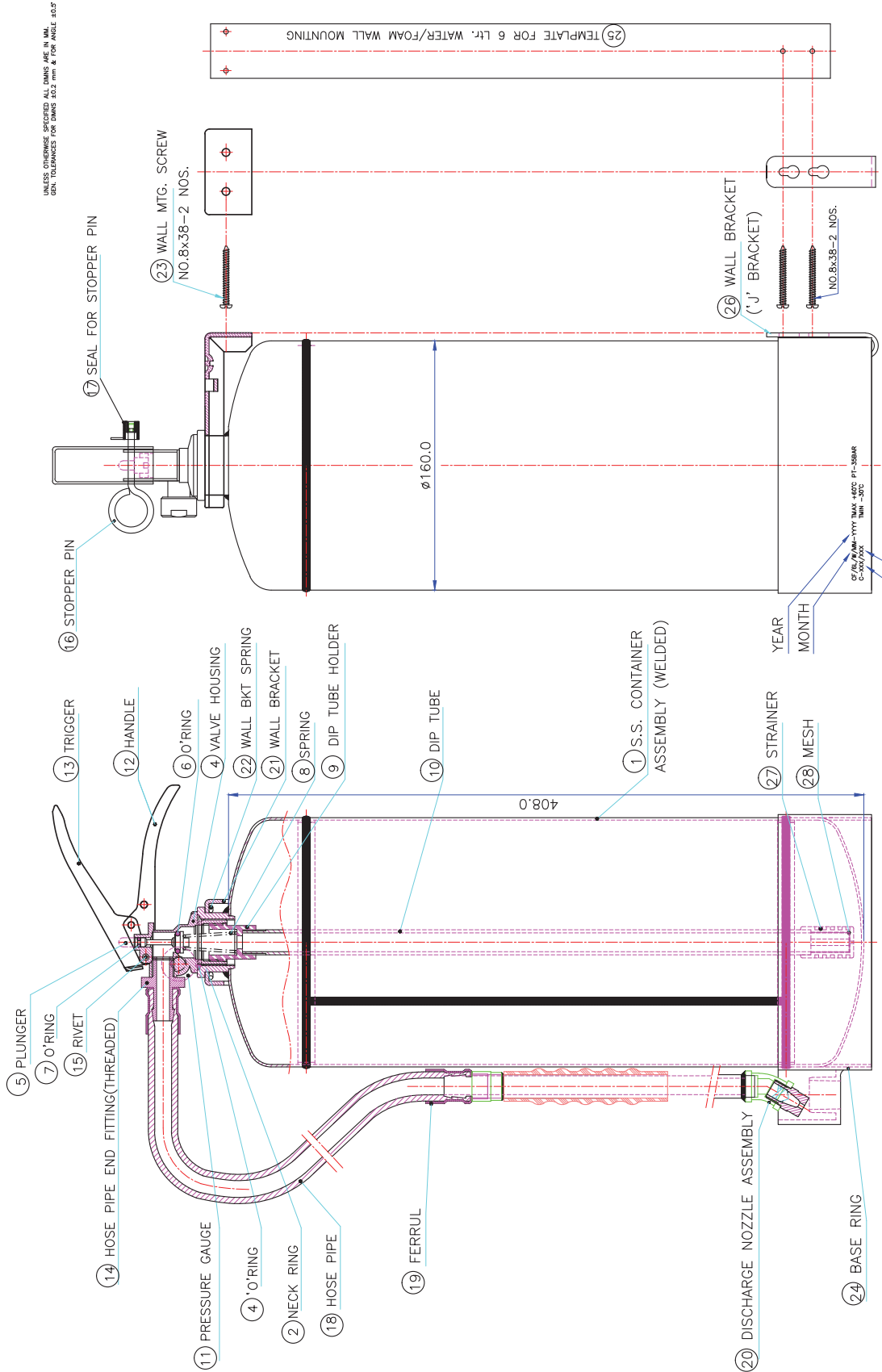
10) DIP TUBE

1) S.S. CONTAINER ASSEMBLY (WELDED)

27) STRAINER

28) MESH

WET CHEMICAL-BASED PORTABLE EXTINGUISHERS 6 Ltr.



DATE		SIGN.		TITLE	
DESIGN	DATE	DESIGN	DATE	DESIGN	DATE
DRAWN	08/07/15	APPD		6 Ltr. WET CHEMICAL-STORED PRESSURE	
CHECK				WATERM-	
APPRO				SCALE - NTS	
				FINISH -	
				DRG.No. CF/SP-WC6/GA/00	

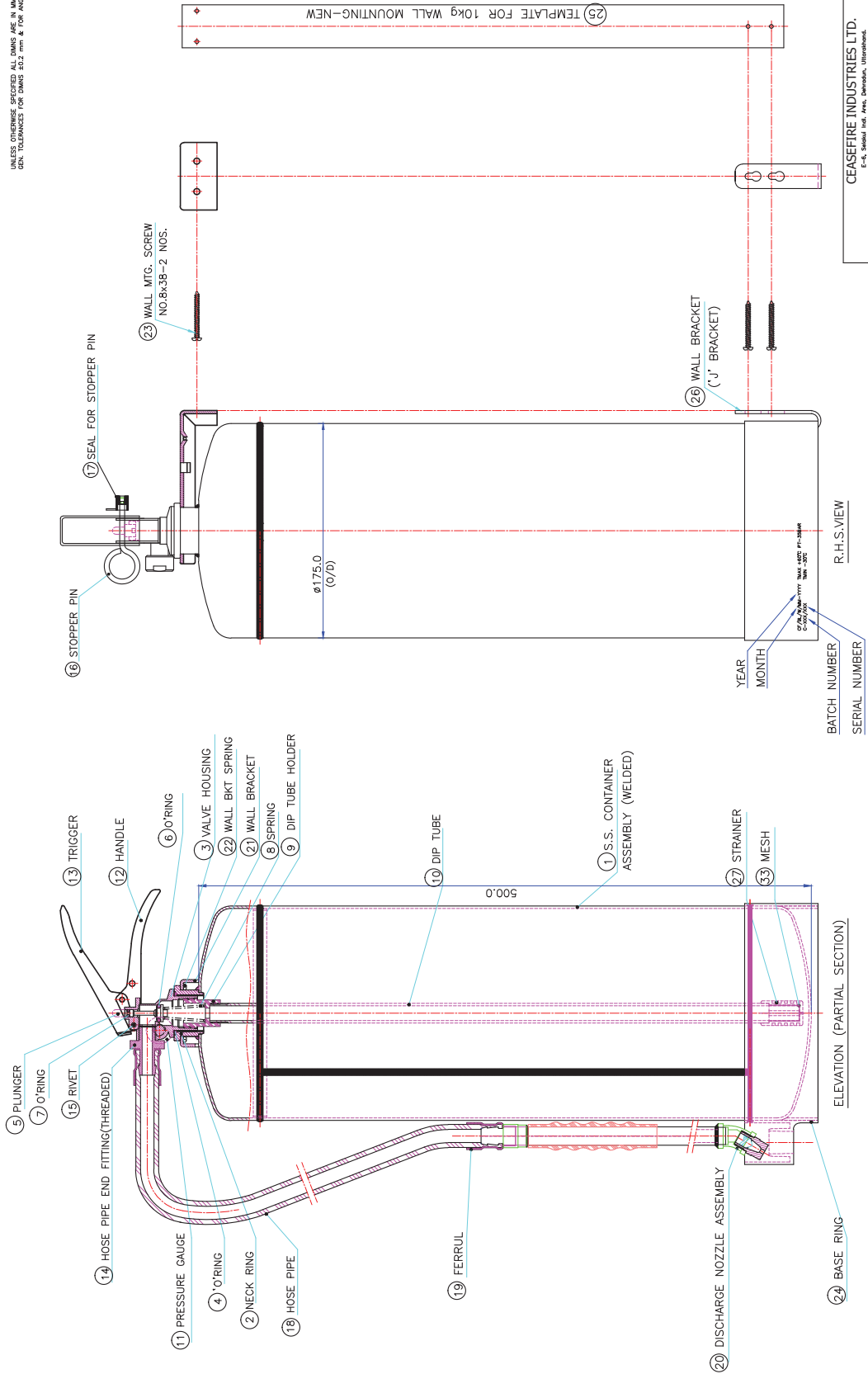
PRODUCT CONTENT
 1 - WET CHEMICAL - 6 Ltr
 2 - CHARGED WITH NITROGEN

BATCH NUMBER
 SERIAL NUMBER

NOTE:-
 1 - FOR PART LIST REFER DOC. NO. CF/PL/SP-WC6/00
 2 - MARKING ENGRAVED ON FOOT RING OF CONTAINER

WET CHEMICAL-BASED PORTABLE EXTINGUISHERS 9 Ltr.

UNLESS OTHERWISE SPECIFIED ALL DIMS ARE IN MM.
GEN. TOLERANCES FOR DIMS ±0.2 mm & FOR ANGLE ±0.5°



DATE		12/03/06
DESIGN	ARF	
TRACD		
CHKD		
APPR		
TITLE		G.A. OF PORTABLE FIRE EXTINGUISHER
MATERIAL		9 Ltr. WET CHEMICAL-STORED PRESSURE
SCALE	- NTS FINISH -	
DRG.No.		CF/SP-WC9/GA/00

PRODUCT CONTENT
 1 - WET CHEMICAL - 9 Ltr.
 2 - CHARGED WITH NITROGEN

NOTE:-
 1 - FOR PART LIST REFER DOC. NO. CF/PL/SP-WC9/00
 2 - MARKING ENGRAVED ON FOOT RING OF CONTAINER

R.H.S.VIEW
 BATCH NUMBER
 SERIAL NUMBER
 YEAR
 MONTH

Ceasefire Industries Private Limited,
B1/ H1, 2nd Floor, Mohan Cooperative
Industrial Estate, Mathura Rd, New
Delhi, 110044.

t **+91-114 184 6800**

Call our Free Hotline :

1800 120 3473 / +91 9540 666 666



Scan the QR code to
visit our website

www.ceasefire.in

Follow us on:

