

# STORMEX<sup>®</sup>

TOTAL FIRE KNOCK-DOWN ABILITY *AT ANY SITE*

## Impulse Dry Chemical Fire Suppression Systems



**SALGROMATIC<sup>®</sup>**  
FIRE SYSTEMS

*Your Key to Smart Protection.™*

# Impulse Dry Chemical Fire Suppression Systems

**Salgromatic STORMEX** has introduced and brought to the market the most advanced systems and solutions in high-security dry chemical fire suppression. Salgromatic DPS and DPSEX series modular impulse dry powder units and systems offers totally new possibilities for easy, contemporary and future-proof fire protection in several different applications. Salgromatic impulse dry powder extinguishants allows to secure easily even the most difficult objects, areas and building premises, which are not appropriate or possible to protect with traditional fire-fighting techniques and systems.

Salgromatic STORMEX technologies and implementation model allow that they are more favorable at price level, require considerably less space and are easier to design, install and maintain than conventional dry powder systems. Above all, the systems provide an excellent fire extinguishing ability, absolute operational reliability and enhanced user friendliness. Lower design, purchase and implementation costs, ease of maintenance and a long life cycle of Salgromatic significantly increases the cost-effectiveness and the overall economy compared to traditional fire protection systems.

Salgromatic STORMEX impulse fire extinguishing systems detects a fire rapidly, transmits an fire alarm forward if required and carries out the fire suppression either **manually, semi-automatically or fully automatically** through suitable fire detection and control system. Systems can also be triggered with non-electric actuation devices, in which case they do not require any external power for operation.

## Non-Pressurized System – Simple and Safe

Salgromatic system is totally non-pressurized and stable in normal state. Operation of DPS powder unit is based on heat reactive specialty compound, which produces great amount of gases and pressurizes the canister after it is triggered. When thermal or electrical ignition activates the chemical it expands rapidly and creates an pressure impulse, which breaks the discharge membrane allowing extremely rapid agent release throughout the protected area. The impulse powder release can be either targeted or spreaded directly from the unit or alternatively through the distribution pipe network and separate nozzles.

Impulse extinguishant does not displace oxygen, it is non-toxic and does not present a significant risk to personnel safety in any circumstances. Extinguishing powder particle size is 5 to 15 microns and it is impregnated with special additives to prevent clumping and aging. DPS impulse powder is also subjected to unique hydrophobization, which minimizes corrosive impacts to metals and electronics compared to conventional dry extinguishing chemicals.

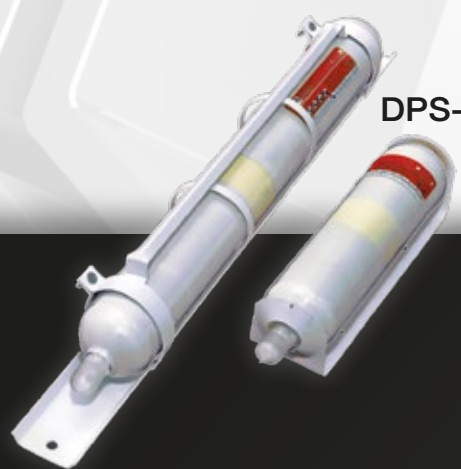
WITH SALGROMATIC FIRE SUPPRESSION SYSTEM THE FIRE IS EXTINGUISHED WITHIN A SECONDS, WHICH MEANS LESS DAMAGE, LOWER REPAIR COSTS, MORE TIME TO RESCUE, AS WELL AS SHORTER PERIODS OF DOWNTIME AND OPERATION INTERRUPTIONS, WHILE SECURING YOUR BUSINESS IMAGE.



DPS-50



DPS-2.5



DPS-EX200



DPS-15



DPS-8



DPS-2.0



DPS-0.3

Salgromatic impulse extinguishants are non-pressurized, hermetically sealed and virtually maintenance free units, which are designed to withstand and operate in extreme conditions (-60...+90°C) in all environments. DPS units are available in many different sizes and designs depending on the application and selection also covers portable systems as well as explosion proof and ATEX-designated models.









## Tested and Approved for Multiple Different Fire Types

Salgromatic STORMEX systems and DPS units utilizes Vekson ABC type dry chemical extinguishing agent, which is tested in accordance with EN 615 and certified by the German MPA Dresden. Vekson extinguishes fire chemically by breaking the chain reaction and physically by cooling the fire. In addition, the powder released on the surface of combustible material provides strong mechanical smothering effect. High kinetic energy and velocity of the discharge, high effective mass and large surface area allow the extinguishing agent penetrate through the flame front into the combustible material, thus ensuring immediate fire suppression.



Conformity from Applicable Parts: 89/106/EEC | 2004/108/EC | 96/577/EC | CEN/TC 191 | EN 12416 | NFPA 17 | GOST R 53286 | CE STANAG 4370 | ISO 15779 | UL 1254 | GOST R 53280-4 | GA 602 | EN 615 | ISO 9001 | FK (SBF) 127

### FIRE TECHNICAL CLASSIFICATION AND SUITABILITY:

	<b>CLASS A</b> Combustible Solid Materials <b>Full Suitability</b> (MPA Dresden, Gost, FGU Vniipo)		<b>CLASS B</b> Flammable Liquids <b>Full Suitability</b> (MPA Dresden, Gost, FGU Vniipo)
	<b>CLASS C</b> Flammable Gases <b>Full Suitability</b> (MPA Dresden, Gost, FGU Vniipo)		<b>CLASS D</b> Combustible and Reactive Metals <b>Limited Suitability</b> (Gost, FGU Vniipo)
	<b>CLASS E</b> Electrically Energized Fires <b>Full Suitability</b> (Gost, FGU Vniipo)		<b>CLASS F</b> Fats, Cooking Oils and Greases <b>Limited Suitability</b> (Gost, FGU Vniipo)

### TECHNICAL SPECIFICATION (General)

<b>Material:</b>	Aluminum Mg5 / Steel Fe37 / Stainless Steel
<b>Treatment:</b>	Red / White Epoxy Powder Coating / RST
<b>Unit Marking:</b>	Heat Resistant Aluminum Polyester
<b>Actuation Methods:</b>	Manual, Semi-Automatic and Automatic
<b>Actuation Mechanism:</b>	Thermal Activation and Electrical Activation
<b>Thermal Ignitor:</b>	SRM-PC1 / SRM-TA1
<b>Electrical Ignitor:</b>	SRM-EID-05
<b>Ignitor Parameters:</b>	< 500mA / 6 - 48VDC / < 10mS
<b>Response Time:</b>	< 3 Seconds
<b>Connector Type:</b>	4-pin, Military Type MIL-C-5015 / "Flying leads"

<b>Protection Classes:</b>	IP 55 & IP 65 / IK 10
<b>Atex (EX) Designation:</b>	II 1G Exi de IIB T4 (from applicable parts)
<b>Environment Classification:</b>	Harmless (ODP=0, GWP=0, ALT=0)
<b>Vibration Resistance:</b>	5 g @ 50...250Hz
<b>Shock Resistance:</b>	10 g > 13000 Impacts
<b>Temperature Range:</b>	-50...+85°C (+110°C)
<b>Humidity Range:</b>	0 - 98%
<b>Corrosion Resistance:</b>	Exceeds > UL 1058
<b>Extinguishing Mechanism:</b>	Chemical and Physical
<b>Transport Classification:</b>	Approved to Transport with All Cargo Forms
<b>Service Life:</b>	10 - 20 Years (typical)

## Efficient, Accurate and Reliable Fire Suppression...



Heat

Chain  
Reaction

## ...Brings Significant Benefits For You and Your Company

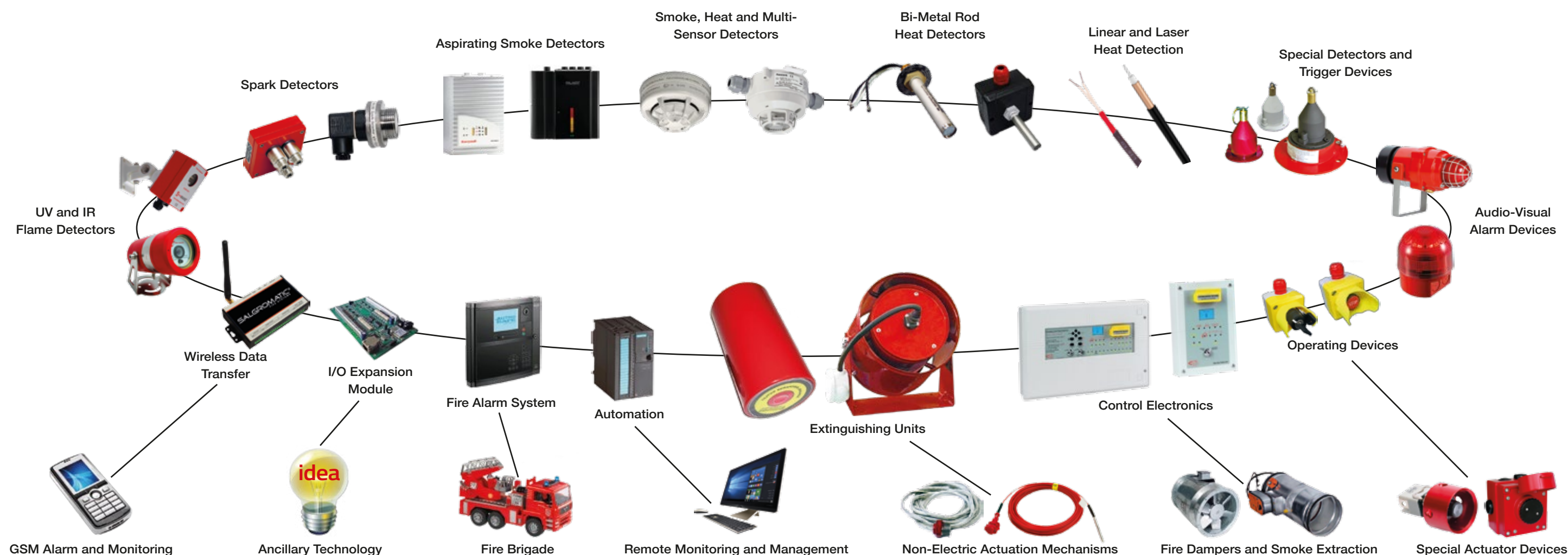
- **PROTECTS**  
business continuity, reliability, company image, critical material and infra
- **SECURES**  
production and services, machinery, equipment, facilities, people and assets
- **LIMITS**  
damages, allows time and facilitates rescue operations in case of emergency
- **MINIMIZES**  
operation interruptions, down-time and repair costs in case of fire hazard
- **IMPROVES**  
safety technological lead, competitive advantage and operational reliability
- **FACILITATES**  
risk management and lowers the likelihood of business interruption losses
- **SAVES**  
in overall costs of fire safety while bringing added and extra value of security
- **LIBERATES**  
resources when knowing that the fatal fire risks for business are managed

### TECHNICAL SPECIFICATION (Product Specific)

Model / Type	Agent Mass	Total Weight	Exting. Capacity (Max. Area m2)	Exting. Capacity (Max. Volume m3)
DPS-7	7000g.	12,4kg.	< 21.0m2	< 42.0m3
DPS-7ex	7000g.	12,4kg.	< 21.0m2	< 42.0m3
DPS-8	7000g.	12,0kg.	< 32.0m2	< 64.0m3
DPS-8ex	7000g.	12,0kg.	< 32.0m2	< 64.0m3
DPS-15	14500g.	23,0kg.	< 48.0m2	< 96.0m3
DPS-15ex	14500g.	23,0kg.	< 48.0m2	< 96.0m3
DPS-50	47000g.	80,0kg.	< 75.0m2	< 210.0m3
DPS-50ex	47000g.	80,0kg.	< 75.0m2	< 210.0m3
DPS-EX200m	350g.	0,6kg.	< 1.5m2	< 4.0m3
DPS-EX200	700g.	1,2kg.	< 3.0m2	< 8.0m3

# 100% Modular Design – Versatility and Possibilities

Salgromatic offers the simplest as well as the most extensive range of system entities and configurations, where you can find the right options for your fire safety needs in the exact scope you want. As its simplest, our extinguishing solution consists of a single automatic fire extinguisher or multiple units, which are controlled with the desired actuation technique. Salgromatic system entities are designed to adapt the user's needs and desires, and all systems can be implemented with central control electronics when the system has virtually unlimited possibilities for management and it can be integrated to all monitoring, alarm and control systems as well as building and plant automation and management.



- Salgromatic systems can utilize of all known fire detection technologies and they can be equipped to work with intelligent smoke, heat and combination detectors, linear and laser heat sensing, mechanical sensors, as well as with special detectors such as aspirating smoke detection systems, line thermal detection, flame, spark and ATEX detectors, and any high-tech detection intended for special risk protection in demanding sites.
- Salgromatic system entities only utilizes the condition stressed components from the industry leading manufacturers, tested and certified by recognized neutral organizations. The individual wishes of the customer are always taken into consider in all technology selections. Salgromatic range covers technical fire-fighting related and the highest reliability and functionality demands meeting fire detection and system technologies, which are compliant with the applicable directives, regulations and fire safety standards.



## Salgromatic Adapts and Offers Extensive Advantages

We have combined our innovative design solutions to advanced technologies, which eliminates the problems associated with conventional fire protection systems and same time bringing the most diverse advantages and the widest applicability on the market. This ensures that future requirements for extinguishing equipment are already combined today in all Salgromatic extinguishing systems and fire protection solutions.

### EXPEDIENT AND FUTURE PROOF

**SALGROMATIC** extinguishing systems are designed precisely to meet the requirements of protected space, industry standards and customer's wishes. Various operational and environmental conditions and factors as well as the type of fire and fire load are always taken into account in extinguishing agent dimensioning and in component selections. This will ensure accurate suitability, efficiency, reliability and safety of your fire protection system in all fire situations. Future-proof and without compromise.

### ENVIRONMENTAL FRIENDLY AND SAFE

**SALGROMATIC** systems are 100% environmentally friendly and compliant to sustainable development principles. (ODP=0, GWP=0, ALT=0). Salgromatic systems do not pollute the environment and do not cause any additional damage when operating. Salgromatic systems increases personnel safety as they do not present significant risk to humans. Salgromatic is medically examined and fire tested by the industry's leading authorities and research institutes around the world. The safety level is also increased due to non-pressurization and stability of the systems.

### ALWAYS ONLINE AND READY FOR OPERATION

**SALGROMATIC** fire system supervises 24/7 and if necessary, notifies forward immediately about possible hazardous situation. Thereby time is obtained to intervene the situation, in which case the actual fire may not have time to ignite. However, if the fire breaks, the system is always first at the site and ready to carry out the extinguishing immediately. If desired, Salgromatic fire system also enables a possibility for twin and multi-stage fire extinguishing in case of fire re-ignition is a likely risk.

### EASY CUSTOMIZATION AND EXTENSIBILITY

**SALGROMATIC** modular design and simple system structure enable that fire system is easy to upgrade and expand in the future according to your needs. The fire suppression capacity of the system can be easily increased or decreased to correspond the possible changes in protected facility and, if necessary, the whole system can be removed, re-installed and re-configured to completely another location or application. Salgromatic extinguishing system is never tied to a place or circumstances and it can always be easily altered or updated in the future.

### FULL COMPATIBILITY AND CONNECTIVITY

**SALGROMATIC** fire extinguishing systems and fire protection solutions can be connected to virtually all building and factory management systems, and they can control and manage, if necessary, other external equipment such as machine controls, emergency stops of various equipment, fire dampers and air ventilation. Salgromatic systems can be set to transmit an fire alarm and system fault signals as well as status information to building and process automation, fire alarm center or other monitoring facility. The systems can also be equipped with a wireless data transfer and may be added with variety of operating devices as well as control and alarm equipment according to the needs and requirements.

### NO FALSE ALARMS OR ADDITIONAL COSTS

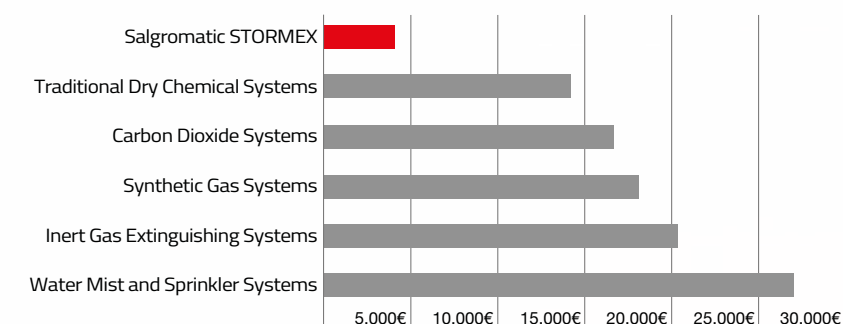
**SALGROMATIC** fire system will never cause accidental discharge of the extinguishing agent in case of an error, false alarm or fault condition, neither the possible fault in the system prevent the fire suppression activation in case of a fire situation. Our systems minimizes false alarms and also unwanted releases of the extinguishing agent, and the expenses and costs arising of these events. You also do not have to worry about any unexpected expenses in the future because operating and maintenance costs for the fire systems whole lifecycle can be precisely calculated in advance. If the system has operated, the re-activation can be done even in a few hours and the fire extinguishing system is back in working order quickly.

## Compact, Durable and Overall Economic

Salgromatic is the most compact extinguishing system on the market and it allows to achieve significant space and cost savings, because it does not necessarily require any floor space and does not require structural changes to the protected spaces, objects nor areas. Salgromatic is a perfect solution for most retrofit applications, since it does not necessarily have to be taken into consider in the building or plant designs and it can be installed without that company's activities and operations are disturbed at all.

### LIFECYCLE AND MAINTENANCE COSTS FOR THE PERIOD OF 10 YEARS

**The table shows average operation and maintenance costs for a 10-year period with several different extinguishing techniques. The default is a medium-sized room protection system.**



Simplicity of the system brings savings in installation and maintenance and since they are not subject to the pressure equipment regulations they do not require any related inspections. Salgromatic is cost-effective and convenient solution from the design and implementation all the way through ownership and maintenance.

#### ■ HIGH TECHNICAL PERFORMANCE AND RELIABILITY

Salgromatic equipment performs reliably in all conditions and operating environments

#### ■ ABSOLUTE OPERATIONAL FUNCTIONALITY

Salgromatic fire systems will not lose their functionality under any circumstances

#### ■ EASY TO DESIGN, INSTALL, USE AND MAINTAIN

Salgromatic is the most easiest and carefree automatic fire suppression solution available

#### ■ NON-PRESSURIZED AND SAFE SYSTEM

Salgromatic is stable and non-pressurized and it does not leak, crack or deteriorate

#### ■ LOW MAINTENANCE AND LOW SERVICE

Salgromatic equipment requires less maintenance and service than any other traditional system

#### ■ NO RISKS OF MANUAL FIRE-FIGHTING

Salgromatic automatic fire suppression eliminates the risks and dangers related to manual fire-fighting

#### ■ COMPLIANT, APPROVED AND FIRE TESTED

Salgromatic is tested and approved by numerous recognized authorities and test institutions

#### ■ DURABLE DESIGN AND LONG LIFECYCLE

Salgromatic is designed for harsh environments and system lifespan can be up to 25-30 years



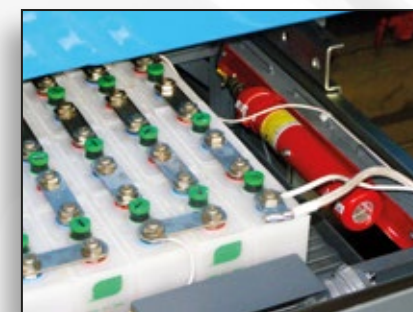
## Virtually Unlimited Range of Uses

Salgromatic STORMEX impulse fire systems can be configured to suit direct to source, local application, total flooding and area protections as well as to individual special fire protections in almost any imaginable application.



Salgromatic fire suppression systems enables high-quality, reliable as well as cost-effective and future-proof technical fire protection that can be easily adapted to suit for the individual and specific requirements of desired application regardless the nature of the operating environment.

**Ask more, we will help you find the most suitable fire extinguishing solution for your needs.**



## Typical Application Areas

- Technical Rooms and Premises of Buildings
- Paint, Explosive, Chemical and ATEX Facilities
- Storages, Libraries, Terminals and Hangars
- Material Conveyors and Filtering Systems
- Galleries, Museums, Archives and Churches
- Substations, Base Stations and Masts
- Power, Equipment and Material Containers
- Heating Plants and Pumping Stations
- Generators, Transformers and Switchgear
- Electrical, Control, Data and Telecom Cabinets
- Industrial Processes, Machines and Equipment
- Electrical, Automation and Monitoring Rooms
- Cable Cellars, Cable Ducts, Gaps and Channels
- Industrial Compressors and Milling Machines
- Escalators and Elevator Machine Rooms
- Airport, Military and Port Equipment
- Wind Turbines, Oil Platforms and Refineries
- Buses, Cars, Trucks and Heavy Machinery
- Water Vehicles, Boats, Ships and Vessels
- Trains, Subways and Traffic Control Systems





High-quality, modern and sustainable development compliant automatic fire extinguishing system is worth investing for your company, now and well into the future.

Salgromatic is a Finnish fire system manufacturer and a forerunning company specializing in contemporary and modular fire suppression technologies. We develop and produce fire protection solutions and related expert, installation and life-cycle services globally for corporations and organizations from all size classes on variety of markets. Our client base consists of many industry leading companies, public institutions and well-known brands, however, we serve equally to small and medium-size enterprises, entrepreneurs and private clients as well. We are flexible and trustworthy partner to our every customer.

EXPLORE MORE ABOUT OUR AUTOMATIC FIRE EXTINGUISHING SOLUTIONS AND REFERENCES AT [www.salgromatic.com](http://www.salgromatic.com)



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#### DID YOU KNOW THIS ?

Salgromatic fire extinguishing solutions represents the industry's forerunning environmental and climate thinking enabling the individual and responsible optimization of corporate business security according to the principles of 100% green and sustainable development, since they have totally Zero impact on the environment, climate and nature.

Salgrom Technologies ja Salgromatic Fire Systems are engaged to Society's Commitment to Sustainable Development "The Finland We Want by 2050" and are building a carbon-neutral corporate fire safety and global society in association with UN's the 2030 Agenda for Sustainable Development. The idea is simple - concrete actions and measurable results.

Follow our progress!

[www.commitment2050.fi](http://www.commitment2050.fi)

Salgromatic, -MAG, -AeroMAG, -SalgroMAG, -DPS, ArmorOn, StormEx, 'Your Key to Smart Protection', '100% Green Fire Extinguishing Technology', 'It Saves Businesses - It Saves Jobs - It Saves Lives', 'Fire Protection Reinvented', 'Total Fire Knock-Down Ability at Any Site', and their logotypes as well as possible translations are registered or unregistered trademarks, slogans and product/trade names of Salgromatic Fire Systems and Salgrom Technologies Inc. or their affiliates and associate companies, whether they are used in connection with the ™ or ® markings.

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