BECAUSE WE BELIEVE IN THE VALUE
OF MEASURED PROTECTION.

THE MOST ADVANCED SYSTEMS FOR
SECURITY AGAINST THE MOST DELICATE HAZARDS

RG SYSTEMS W-FOG

W-FOG System

for the protection of

OFFICES

The offices are halls, rooms or buildings of different kinds, sizes and uses, but when we talk about fire protection these are always considered as busy areas, for this reason these must be designed with harmless agents for the staff and, in event of fire, ensuring a quick and safe evacuation.

Depending upon its features and associated uses, protection may vary. Also these are usually the multipurpose areas, which easily change content & distribution wise with relative frequency. RG W-FOG is suitable for the vast majority of applications usually in such facilities, and its design is easily adaptable in cases of space restructuring or the inclusion of new uses (files, data rooms, etc.).

WHY USE RG W-FOG

IN OFFICES

The RG W-FOG devices are adapted to the specific requirements of offices, hence ensuring that with a common agent and a limited number of devices several hazards such as offices, archives, warehouses, data centres and telecommunications etc. are protected.

In case of change of activity, it accommodates variations in pipe lines and redistribution of nozzles, maintaining the components with costly replacement, the equipment and valves.

Always busy places

Harmless extinguishment for the occupant, that does not hamper the evacuation

Clean, safe and 100% environment friendly agent. Good visibility: Pulls smoke and particles, facilitating the orderly and quick exit of personnel.

Valueable contents

Data and document protection

Extinguishes without wetting, minimal damage to equipment, files, structure and furnishings.

Costly downtime

Not to compromise the viability of the business (loss of customers, production, assets, service stoppages)

Immediate action. Reduces resumption time and the cleaning tasks

Various other associated uses

Unique multipurpose system

Suited for solids, liquids and energized type of fires.

Reconfigurable spaces

Flexible and adaptable installation

Check valves: Simultaneous protection of multiple rooms. Acceptable modifications without changing the agent or the equipment.

CAUSES OF FIRE IN OFFICES

RG W-FOG incorporates the known extinguishing properties of water with the most advanced technologies and ensures an optimized extinction based on:

- **Minimum droplet size: the surface is increased, achieving maximum heat absorption rate.**
- **Reduction equipment: up to 90% less water is required, with which storage pipeline and systems are optimized significantly.**
- **Steam production, which hinders the contact between oxidizer (O2) and fuel. Quick action: minimizing damage to documents and to the building structure.**

The fire types & fire hotspots in this kind of buildings may vary depending on the place where it starts, for example:

- Paper and solid Fire: classrooms, offices, library, archives
- Electrical fires: especially in computer rooms, offices, data centre, servers, etc.
- Fuel: boiler room, tanks, swap area, supply point.

Therefore, it is essential, as early as from the design phase itself:

- Identify the different fuel elements
- Bring up an early detection and automatic extinguishing system
- Designing a proper sectorisation
- Plan evacuation routes
- Develop training plans for staff and occupants.

RG-Systems based on the requirements of each building to be protected offers its experience and know-how to plan, design and install fixed extinguishing systems with water mist.

COMPONENTS

CYLINDER

The propulsion of water storage cylinder is done with the others of nitrogen at 200 bar, in proportion of 3: 1.

PUMPING GROUPS + TANKS

The water is pressurized and drives groups of positive displacement motors.

OPEN NOZZLES

They are used with dry pipe systems where the activation is electric. Common in small hazards where in the area to be protected coincides with the area to act upon.

CLOSED NOZZLES

They have a thermal break bulb that breaks only due to heat, releasing the agent on the source of the fire.

If the pipe is moist, it can operate without detection.

PROTECTION WITH WATER MIST IN OFFICES

The offices spaces are interconnected premises with diverse uses, flexible, variable and for different uses and applications.

Thanks to the great flexibility of configuration and action of water mist system RG-Systems acts against all the present fire outbreak spots.

MEETING ROOMS

Large rooms, high ceilings height

Big number of users, agglomeration

Homologated nozzles for high ceilings

Better visibility, better and more lasting conditions for evacuation.

OFFICES AND DESKS

Abundance of solid fuels (paper, IT equipment)

Expensive property and confidential documents

Clean and safe action, if damaged.

Minimal cleanup and resumption of activity

ARCHIVES

High concentration of combustible

Limited accessibility (confidentiality)

Discharging very effective against large accumulation of solids, with possible extension to 30 minutes or more.

Centralized equipment in premises - specific areas

DATA CENTER / CONTROL ROOM

Presence of energized fires

Raised floors and racks with dense wiring harnesses and difficult access

Nonconductive Agent, suitable in case of electrical fires

Protection of sensitive equipment without damaging

INSTALLATION EXAMPLE

CYLINDER BATTERIES for small hazards

The UAC RG W-FOG systems are used in medium or small size environments. Bottles of 40, 67 or 80 L may be used, depending on the risk. Activation is carried out electrically, manually, pneumatically or pyrotechnically.

PUMPING UNITS for big hazards

Depending on the chosen configuration, these can be RG W-FOG UAPD electric, diesel RG W-FOG UAPE or mixed.
Guarantees the protection of different sizes rooms and compensate the loading losses up to the less used nozzle.

RG SYSTEMS W-FOG: HOMOLOGATIONS FOR OFFICES

RG-Systems has specific homologations for the use of offices, which was achieved after full-scale complex tests in VTT laboratories.

The hazard is ordinary Class 1, reproduced in a laboratory with the usual & common office furniture & stuff to imitate the conditions in which the fire breaks out. The action of water mist system with traditional sprinkler (sprinkler) is compared.

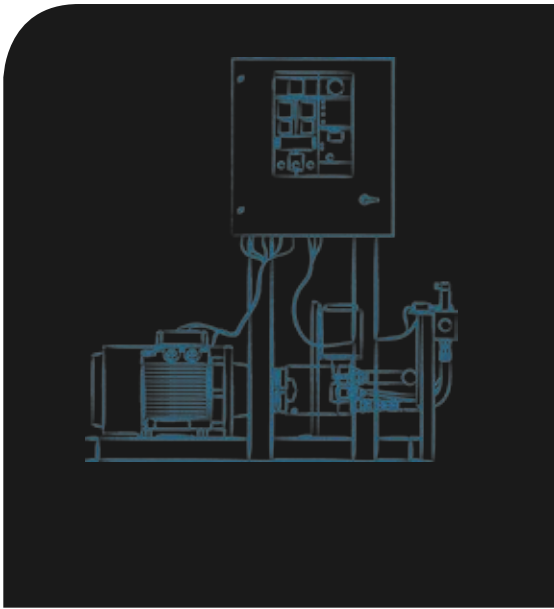
These tests are for determining the ability to control and suppression of every nozzle model. They also define the following project parameters:

- ***Type of nozzle (minimum flow)***
- ***Maximum distance between nozzles***
- ***Minimum service pressure***

The action is equivalent to, and automatically, on breaking nozzle bulb in the event of free flow of flammable gases. It was performed in a room of 72 m2, well ventilated and with a ceiling of 3.3m. Including with the outbreak spot covered with the usual office stuff and furniture, away from the nozzle, the W-FOG system is capable of achieving and controlling it. After more than 35 trials, the final evaluation found that the action is more effective than with sprinklers, faster and with less damage by fire, but also by the discharged water itself (up to 90% less than sprinklers).

RG W-FOG IN OFFICES:

- **More quick action**
- **Better visibility**
- **Less damage to furniture and equipments**
- **More assured evacuation**



C. Alfoz de Bricia, 4 P.I. Villalonquéjar
09001 BURGOS (SPAIN)

Tlfno. +34 947 28 11 30
Fax. +34 947 28 11 12

www.rg-systems.com

RG SYSTEMS