The basic principal of water mist systems, which gives them such extraordinary qualities, is the discharge of the HIGH-PRESSURE agent and at a very high speed through these mist devices, which puts out a TINY drop that serves to optimise the absorption of the fire’s calorific energy and then goes on to perfectly penetrate the outbreak of the fire, maximizing its ability to fight fire.
Thanks to the ever important research and development work of RG Systems, its nozzles have the greatest coverage areas, being able to minimise the quantity that have to be used to protect a hazard, this being one important competitive advantage since it makes the effort required very simple when it comes to acquiring and installing the system.

MADE OF STAINLESS STEEL WITH THE HIGHEST LEVEL OF TECHNOLOGY, PROTECTS ANY HAZARD, INCLUDING THE MOST DELICATE ONES. ITS HIGH LEVEL OF TECHNOLOGICAL DEVELOPMENT ALLOWS ITS OPERATION TO BE OPTIMAL, IN SUCH A WAY THAT MAXIMUM EFFICIENCY IS ACHIEVED IN FIRE FIGHTING WITH THE MINIMUM POSSIBLE IMPACT.

The flow and discharge pattern used by each nozzle depends on the design, type and number of MICRONOZZLES it has, as well as the working pressure. Its performance is the result of an important experimental and numerical analysis, through the conduct of complex trials with fire on a real scale and the use of advanced computer modelling.

For the proper and easy installation of RG-Systems nozzles, they have an external thread that allows them to easily be installed in the distribution network without causing leaks and with total reliability. RG-Systems also provides accessories specifically designed for the nozzles, which allows the installation to be even more simple in any circumstance.

Only this system achieves maximum efficacy of water as an extinguishing agent, with the added value of being totally RESPECTFUL, not only to the environment, but TO THE ENCLOSURE where it is discharged, which allows it to be used in almost any fire scenario, without resulting in damages to the property it protects or to the people within, obtaining maximum fire fighting performance.
Closed nozzles have a thermic fuse, with both normal and rapid responses, which serves to carry out precise detection without false alarms. These elements, which are critical to the proper operation of the system, characterise this type of nozzle and they can be calibrated to a wide range of temperatures, allowing any hazard to be covered.

RG-Systems has not only centred its technical design on fire protection, but also on the aesthetic aspect of the nozzle, which allows for their easy visual integration under any circumstance without seeing any alteration to the original design, something highly beneficial to new constructions and in the protection of historical or old buildings. They can also be installed with an embellished plaque to improve their look.

The simplicity of their installation allows the necessary maintenance and inspection tasks to be very easy and thus the associated costs at a minimum, assuring the maximum reliability of the water mist system and reaching an extraordinarily long useful life.

The RG-Systems nozzles, as they use a minimum amount of water, allow the piping network to have very small sizes, in such a way that the mounting of the installation that will supply water to each nozzle is very simple and quick to put into operation. Not only is the time and cost of necessary tasks reduced, the integration into the building is absolute, no matter the date of construction; all this with minimum maintenance.

Our nozzles have the greatest number of global level and they demonstrating their range of applications internationally-recognised approvals at the are a guarantee of their quality, high efficacy in fire fighting in the greatest with complete reliability.
APPLICATIONS

The insurmountable properties of the water mist systems developed by W-FOG RG-SYSTEMS provide maximum protection in the greatest range of applications in the market, such as, for example:

- OFFICES
- EDUCATIONAL CENTRES
- CONFERENCE ROOMS
- WAREHOUSES
- PRODUCTION CENTRES
- CABLE DUCTS
- STATIONS AND AIRPORTS
- TRANSFORMERS
- TURBINES
- TECHNICAL ROOMS
- FILE ROOMS
- COMPUTER ROOMS
- COMMERCIAL CENTRES
- HOSPITALS
- HOTELS
- RESTAURANTS
- ETC

WET PIPING
When idle, the system keeps the piping filled with water at a certain pilot pressure, so the system is ready to act against fire immediately if it occurs. When a fire occurs, the detection, signalled by the thermic bulb of the related nozzle, results in its opening, allowing for system activation and the immediate water misting only in the area that needs to be protected.

PREACTION
This type of system is used in those cases where guaranteeing that a false alarm does not signal a discharge of water mist is desired. With those, when the system is idle, the distribution network does not hold water in the piping. It is an electronic system, which initiates the activation of the water mist pressurisation system, but this is not discharged in the enclosure until the electronic signal is confirmed by one of the thermic fuses blowing, which only takes place when a fire blows the calibrated fuse.

DRY PIPING
In the case of dry piping systems, the distribution network stays pressurised with air or nitrogen, thus avoiding freezing in the event of low temperatures. If a fire breaks out, the thermic fuse would blow, depressurising the network, which would initiate the activation of the water mist pressurisation system.

Dry Piping

The EMM C model closed nozzle present numerous advantages, the ability to easily and effectively achieve the selective protection of an hazard in an enclosure, while at the same time saving volume, being one of the most important. This beneficial mode of operation is achieved thanks to the fact that the water mist discharge is only produced through the nozzles that are in the zones affected by fire, while those in the remaining areas in the same enclosure remain unactivated. That allows the installation requirements to be optimised, both relative to storage for things like the water pump and to the distribution network, always with highest level of protection.