

Water Mist System (Standalone)

A water mist system sprays droplets of water mist that rapidly evaporate, creating massive amounts of steam. Because this process is highly energy demanding, it reduces the temperature of the fire rapidly. Furthermore, the rapidly expanding steam fills up 1700 times more space than the water droplets, displacing air from the fire, further reducing the oxygen the fire needs to burn. A water mist system combines the strength of deluge and gaseous systems. Water mist systems are primarily used for fire protection in enclosed areas such as emergency generator rooms, turbine enclosures, and machine enclosures.

SYSTEM DESIGN

A water mist system consists of a network of dry pipework and water mist nozzles. The distribution network is connected to a pressurized water vessel by inert gas through a normally closed on-off valve. The system is normally equipped with the necessary valves, strainers and instrumentation for operation, maintenance and testing purposes.

In addition to the standard design, Firenor also offers custom designs to perfectly match the specific needs of customers. A custom built system can be expanded to cover multiple zones, can use pneumatic, hydraulic, or electrical signals for the release mechanism, and can be designed to meet any project required safety integrity level. Furthermore, if freezing is a concern, the water mist

system can be stored in an insulated cabinet, as opposed to the standard open frame. Finally, all systems, whether standard or custom, are full flow pre-tested before delivery, to ensure system quality.

VERIFICATION

Every system can be customized, upon request, for compliance with applicable rules, regulations and project specific requirements. Full documentation for any tailor-made products are available and include all necessary certifications, third party verifications such as DNV/GL, BV, ABS, etc., and full scale test reports, if required.



Water Mist, Standalone



◄ WATER MIST SYSTEM (Standalone)

FEATURES

- Flexible design
- Compatible with various hazardous area classification and regulations (ATEX, UL, CSA etc)
- Compatible with IEC 61508 for Safety Integrity Level 2 or 3
- Low cost for each discharge
- Environment friendly
- Safe for personnel
- Working environment friendly design

MATERIAL

Every Firenor system is available in the following materials:

- Galvanized carbon steel Duplex
 - Duplex • SS316
- Copper nickelSuper duplex
- 6Mo

• Titanium

• GRE

NOZZLES

Firenor offers an extensive variety of nozzles for use with the water mist skid for different applications.

- Low and high pressure
- Total flooding or local protection

Firenor can design the nozzle placement for the water mist system and carry out all necessary hydraulic calculations for optimal system usage.

DOCUMENTATION

The engineering department produces documentation relevant to all phases of the project. Documentation normally includes the following:

- Quality plan
- ITP
- Drawings
- Data sheets
- Indexes
- Procedures
- Calculations
- Certificates
- Reports
- User manual
- MRB



Firenor International AS Holskogveien 48 4624 Kristiansand, Norway

Office	+47 99 09 73 00
E-mail	post@firenor.no

www.firenor.no