

The water mist extinguishing licensing practices in Hungary

Paragraph 13. § (1) of the law 1996. XXXI. on protection against fire, technical rescue and fire fighting (fire protection law) states that it is only permitted to launch, implement, use and keep ready only those fire-extinguishing products that possess the right certifications.

Paragraph 4. § h) of the fire protection law states that water mist extinguishing products are considered fire extinguishing products.

„4. §

h) fire extinguishing product: equipment / product, extinguisher, used for notifying, extinguishing of fire, easing intervention, or prevention of spread of fire; any vehicle, equipment, communications and protective equipment used by fire services during extinguishing.

There is no standard procedure for the designing of built-in water-mist extinguishing equipments, so according to the 13. § (2) paragraph of the fire protection law, licensing will be made by the National Disaster Recovery Headquarters (fire safety authority); launching, implementation, use and keeping ready of products can happen only after this.

The National Disaster Recovery Headquarters (belongs to Ministry of Home Affairs) will examine during the licensing procedure if the parts of the system are in general complying with the requirements: the authority can license the launch of water mist extinguishing product, upon customer's request.

The authority will evaluate the adequacy of the water mist extinguishing equipment during the launch licensing process according to CEN TS 14972:2008 technical specification – as there is no national standard or legal procedure in Hungary.

During the launching procedure the customer has to submit at least one real-size fire test report and test report to certificate that water the mist extinguishing equipment can be used for the protection of at least one risk-class area.

Note: The regional organisation of Disaster Recovery will examine the technical adequacy of the water mist extinguishing systems for one proper case during the procedure.

As a legal requirement, according to the chapter 10, paragraph 141. § (2) of National Fire Protection Regulation 28/2011, if the technical requirement of the usage of a built-in fire extinguishing equipment are not defined, it will be executed by fire-tests.

The CEN TS 14972:2008 technical specification states the requirements for documentation of system- and type tests. The documentation has to be submitted by the applicant during the license process.

According to the technical specification, the adequacy of water mist extinguishing equipments has to be certified by ISO/IEC 17025 standard, by real-size fire tests made by the qualified examining laboratory. Those laboratories that do not comply with the above mentioned, cannot make fire tests, provide test reports and reports. The B.6 part of CEN TS 14972:2008

technical specification states: the performer of fire tests has to verify that it operates with a high-quality system, they are technically adequate, and can make technically valid results.

Parts unit examinations:

According to part 4.1 of CEN TS 14972:2118, the examination of parts belongs to the complete evaluation of water mist extinguishing systems. Appendix B of the standard prescribes the examination of water mist nozzles. Other parts of the equipment have to undergo the regular evaluation, or supervision. If there is no standard for the relevant part-standards, the laboratories have to provide one time evaluation.

According to 10.1 b) of CEN TS 14972:2008, the documentation of a system-licence or a risk has to contain the reports made by internationally acknowledged laboratories.

Note: the term 'internationally acknowledged laboratories' was not defined in standard CEN TS 14972:2008, so the authority in charge has the right to decide which laboratory can be considered internationally acknowledged.

The licence process is an administrative process belonging to 2004/CXL law about distribution licence process and administrative proceedings, so the authority will act according to the rules stated in the law.

Further parts of the system-licence and examination documentation to be submitted at the distribution licence process:

Petition (stamped)

Documentation about the previous actions made together with authority (notes, reports)

Technical documentation, containing:

operational description of the system

application limits of the system,

risk categories that can be dealt by the system,

an itemized list of the parts of the system, their exact name

clear presentation of the system of signs to identify the parts

technical data sheets of the parts

producer's standards and recommendations for system design

producer's standards and recommendations for implementation and installation of the system

producer's standards and recommendations for putting the system into operation, the qualifications of the commissioning engineer

producer's standards and recommendations for continuous – made by operator – monitoring of the system

producer's standards and recommendations for maintenance organisation

manual for maintenance and operation of the system

Having the (general) distribution licence, the regional outlets of disaster prevention will act as first level authority – due to government decree – during the installation and implementation procedures of water mist extinguishing systems.

The implementation and installation procedures are also administrative proceedings, belonging to 2004/CXL law about distribution licence process and administrative proceedings.

The authority, during the implementation process, will examine the adequacy of the water mist extinguishing systems (having general distribution licence) for one proper area, risk class, destination. The method is examinations by fire tests. The authority, among others, will examine if the equipment is built from the parts that have the distribution licence, if designing of the system was executed in accordance with manufacturer's manual for design, maintenance and operation. The necessary content of the implementation documentation is described in the law.

One of the main principles during the implementation and commissioning of water mist extinguishing equipments is that the representative of the authority should understand the operation of the system. He should be able to recognise the relationships between the extinguishing system and the protected area (building), based on it analyse the circumstances during the fire and be able to evaluate-

There is no law, or standard in Hungary about the commissioning requirements of water mist extinguishing systems, so the authority will make onsite tests to verify the adequacy of the system for protection and operation. Operation of built-in extinguishing systems is in close connection with the mechanical and electrical systems of the building, it operates in accordance with its fire alarm, so during the tests the authority will be able to examine its operation considering all possible circumstances. The results of the test, the results of the commissioning proceedings will be included in a report. During the process a realisation documentation will be submitted to the authority, containing the technical description and presentation of the realised status, plans, certificates of the parts used, and those certificates and contractor statements that verify the adequacy of the procedures used during the installation (pressure test, pipe cleaning, welding)