

Low pressure water mist for fire fighters as the way for effective firefighting of small and medium fires

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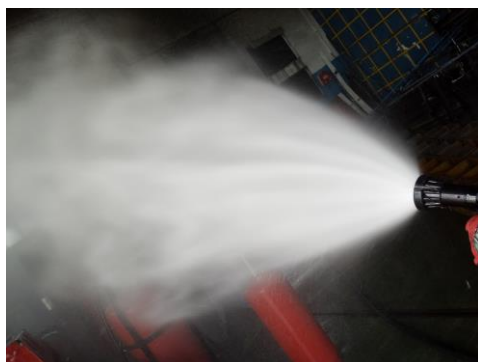
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Abstract

For firefighting action lot of water is usually used as stream or in best case dispersed water called by fire fighters mist. This mist is coarser than official MFPA 1000 micron and has nothing to do with real mist like on the picture.

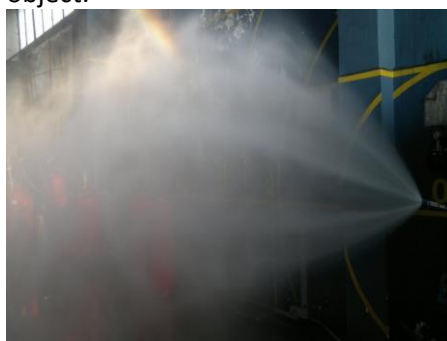


1. low pressure mist stream for firefighting

It is true, the distance of the fine mist will not be bigger than 15 meters, but it's efficiency is incomparable. That's why these nozzles are for small and medium fires.

It will be presented how to apply the mist for small, like grass, rubbish bin or tyres fires or for larger like bush, cars or rooms.

This mist can be delivered from outside not less effective than expensive, high pressure Cobra system to extinguish closed compartments like rooms, garages, production hulls without entering burning object.



2. mist given by the wall



3. mist given by the ceiling

Water availability is always, especially in dry countries a problem. Mist nozzles are able to use for firefighting up to 90% of water as normal stream no more than 5%. Not only firefighting requires water in big quantities. Real problems is when curtain is required for heat but especially gas absorption. Mist curtain is saving up to 70% of water and increases absorption capability more than 10 times



4. mist curtain

Conclusion is simple. Low pressure mist used by firefighters can save up to 80% of water, is more effective than just water, has better reactivity in terms of heat or gas absorption and what is very important is safe for firefighters.

The submission should include title, author(s) and affiliation/organization. The abstract should be structured logically to give an overview of what is to be presented. The following five elements should be used: background, objectives, methods, results, and main conclusions as well as recommendations. The abstract should be 100 to 400 words in length and in 11 point size. The abstract including figures and tables must not exceed 2 pages. Maximum file size is 4 MB.

KEYWORDS: inert water mist stream, safety of firefighter, water sawing, screening effect - jedno do wywalenia