



XFlow[®]

Water Mist System

For land applications

Save time, space and money ... and lives if worst comes to worst

The XFlow® water mist system offers many advantages

XFlow® is a state-of-the-art, highly efficient water mist system used for fire fighting in the marine industry as well as on land – in for instance office buildings, shopping centres, warehouses, nursing homes and hospitals.

In the past decade, water mist systems have primarily been used in the marine industry, but in the meantime they have also proved suitable for use on land. Here the systems have replaced traditional sprinkler installations with excellent results.

With XFlow®, you will get the ultimate solution in this price range – a very reliable and competitive fire protection system based on the newest technology in this product area.

XFlow® is a low-pressure system that uses very little water. It has a simple design and its water mist heads are placed far apart. All this gives you a lot of advantages which are not offered by traditional sprinkler systems, for instance it:

- Reduces the risk of fire-related damage
- Reduces the risk of water damage
- Saves space
- Reduces installation time
- Looks attractive
- Is a cost-efficient all-inclusive solution



The XFlow® nozzle type NF 20L is installed in many buildings around the world.

The technology behind XFlow®

A central element of the XFlow® system is its unique water mist head. When the system is activated, the water mist head will spread a combination of fine water drops and water mist. The drops cool down the fire, while the water mist evaporates due to the heat. The vapour encapsulates the flames, displacing the air and thereby also the oxygen so that it no longer fuels the fire. This combination ensures that flames are smothered quickly and effectively.

The unique technology makes it possible for each water mist head to disperse water mist over a zone of up to 25 m². This in turn allows the water mist heads to be spaced further apart than in traditional sprinkler systems, which have a maximum coverage of 12 m² per nozzle. In addition, the XFlow® system is a low-pressure system which uses very little water. XFlow® uses less than a third of the water required for traditional sprinkler systems.

The XFlow® nozzle type NHP 18A is fitted with a liquid-filled glass bulb which breaks at a pre-set temperature and activates the water mist head. It then sprays water mist directly at the area where the fire has started. In addition, the water mist head has been designed to avoid vandalism or unintentional activation.

The XFlow® nozzles type NHP 2/4 are open type nozzles activated through an existing detector system, for instance a smoke or fire alarm. These water mist heads are especially well-suited to staircases and atriums.



The XFlow® water mist head is designed for wide spacing. This means that considerably fewer water mist heads are required for installation in order to protect the area affected by the fire. This in turn reduces the installation costs.



ENJOY THE BENEFITS OF XFLOW®

- **REDUCES THE RISK OF FIRE-RELATED DAMAGE**

The XFlow® system suffocates and cools down the fire quickly and effectively. It thereby inhibits the flow of heat beyond the fire zone, thus minimizing the risk of fire-related damage.

- **REDUCES THE RISK OF WATER DAMAGE**

The XFlow® Water Mist System puts out fires as effectively as any other sprinkler system, although its water consumption is considerably lower. Water mist has proved to be the optimum solution - it puts out most fires quickly and effectively without significant consequential damage. Furthermore, the extremely low water consumption is an advantage anywhere, but can be crucial in areas with electrical equipment, in preservation-worthy historical buildings or in spaces where important documents or museum objects are kept.

- **SAVES SPACE**

The XFlow® system uses smaller pipes than traditional sprinkler systems. This is often a great advantage when installed in existing buildings, but also in new buildings, where more and more installations are placed above the ceiling, taking up a great deal of space.



- **REDUCES INSTALLATION TIME**

Due to the more widely spaced water mist heads, an XFlow® Water Mist System requires fewer nozzles than a traditional sprinkler system. The combination of a simple system, small pipe dimensions and standard press fittings substantially reduces the installation time.

- **LOOKS ATTRACTIVE**

The visual effect of the system is another distinctive feature of XFlow® compared with traditional sprinkler systems. Only a small part of the water mist head is visible below the ceiling, and it is even protected by a discreet cover. The cover is available in a range of colours matching the ceiling and adding an attractive architectural finish, with the water mist heads discreetly blending into the ceiling.

- **IS A COST-EFFECTIVE**

- ALL-INCLUSIVE SOLUTION**

Fewer water mist heads and reduced installation time are some of the factors that keep the total costs of the XFlow® fire protection system at an extreme competitive level.



XFLOW® WATER MIST SYSTEM COMPARED TO CONVENTIONAL SPRINKLER SYSTEM

Type:	Conventional Sprinkler System	XFlow® Water Mist System
Pressure at nozzle	0,5 bar	4 bar
Way of extinguishing	Cooling	Cooling and suffocation
System configuration	Heavy	Simple
Price	Low	Low
Water consumption	5 l/min/m ²	1,6 l/min/m ²
Pipe size	Large	Small
Recommended pipe material	Black steel	Stainless steel, copper piping
Pump working pressure	< 10 bar	< 12,1 bar
Fitting	Sprinkler fitting	Press fitting
Maximum area covered per nozzle	12 m ²	25 m ²

INSTALLATION GUIDELINES

The XFlow® System for land applications can be installed in accordance with various guidelines for water mist and sprinkler systems. An overview of some of the most common guidelines, which can be used for installation of the XFlow® System for land applications and the market areas they apply to, is listed below.

Guidelines	Area
IMO Resolution A50, IMO MSC Circular 66 8	Maritime
NFPA 750 / NFPA 13	USA / Worldwide
Factory Mutual – various standards and drafts	Insurance / USA
CEN draft, prEN 14975 / (TS 14975)	Europe
AS 4587	Australia
Danish Regulation 251 / 254	Denmark



Novencos XFlow® Water Mist System is used for fire protection of the new holiday resort, SeaWest in Denmark including water park and wellness facilities.

TESTS

The XFlow® system has been pre-tested by DBI (Danish Institute of Fire & Security Technology) and in accordance with Factory Mutual's system testing standard.

Furthermore, the XFlow® Water Mist System is designed in accordance with SOLAS Chapter II-2 and IMO Resolution A.800 (19), and it has been approved by a number of marine classification societies.

Novenco is certified according to ISO 9001 and our environmental management system is certified in accordance with ISO 14001.

More information about the XFlow® Water Mist System

If you would like to know more about Novenco's XFlow® solutions, please contact our sales department for an informal conversation - no obligation.

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Novenco develops and manufactures ventilation and fire fighting systems that are marketed and distributed world-wide through subsidiaries and agents.

The company was founded in Denmark in 1947 and has become one of the worldleading suppliers.

Novenco symbolises quality and environmentally friendly products. The company is certified according to ISO 9001 and ISO 14001.

The headquarters of Novenco is located in Naestved, Denmark.

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Read more about Novenco on www.novenco.biz.