

Case story | SEM-SAFE® high-pressure water mist system

Reliable fire fighting on Esvagt Aurora

Danfoss Fire Safety A/S



SEM-SAFE® high-pressure water mist system was put to the test when fire broke out.

The Vessel Esvagt Aurora, a 87M Field ERRV (Emergency Rescue and Recovery vessel), Ulstein X-bow design SX123, was built by the Spanish shipyard "Zamacona" and delivered to Danish shipowner "Esvagt A/S" in 2012. Esvagt A/S, a partly Maersk-owned company. Esvagt has a long tradition for using the SEM-SAFE® high-pressure water mist system from Danfoss and therefore the choice of fire fighting system was easy.

All Esvagt vessels are purpose-built for a variety of rescue operations, and an essential and mandatory focus area is therefore ship safety and the quality and operation of the installed fire fighting system.



System Description

The SEM-SAFE® system protects the engine room with both a total flooding - and local application water mist system. In addition to the system class requirements, a system with a back-up unit for emergency operation in case of total black-out has been developed in close corporation with Esvagt. The vessel is classed by DNV and DMA.

Mr. Kristian Ole Jakobsen COO at Esvagt A/S explains:

"By teaming up with Danfoss, we have together developed a state-of-the-art fire fighting system, which provides increased safety for our crews and vessels - a focus area which is an imperative request for us."

SEM-SAFE® high-pressure water mist system

Fire broke out

11th October 2012, Esvagt Aurora unfortunately experienced an incident with leaking marine diesel oil which was dripping at a hot exhaust pipe of one of the diesel gensets, which led to a potentially ship-wrecking fire. The crew detected the fire and released the SEM-SAFE® high-pressure water mist system manually. In 2 minutes the fire was completely extinguished by the SEM-SAFE® high-pressure water mist system.

Mr. Kristian Ole Jakobsen continues:

"All onboard the vessel were very impressed by the capability and efficiency of the SEM-SAFE® high-pressure water mist system. The fire was extinguished in very short time and there is absolutely no doubt that the SEM-SAFE® system works and we fully trust its safety and reliability. Another major advantage is that we live-test the water mist system every month, and the crew is therefore fully aware of how to operate the system – AND that you are able to release the system without any prior precautions."

If the fire had not been detected by the crew, the automatic function of the SEM-SAFE® system would have released the system and extinguished the fire automatically.

After the fire was extinguished, the vessel sailed to port to check all functionalities, but the vessel could easily have continued operations without interruptions or jeopardizing the safety of the vessel.



Esvagt Aurora, protected by SEM-SAFE® high-pressure water mist for fire fighting from Danfoss.

SEM-SAFE®

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