Enhancing Tunnel Safety: The Efficacy of Water Mist Fire Suppression Systems Through Full-Scale Fire Tests

Author: Massimo Farnesi

Company: Ultrafog s.r.l.
Via Ghivizzani 1859, 55054 Massarosa (LU), ITALY.

E-mail: massimo.farnesi@ultrafog.com

Author and Presenter:

Massimo Farnesi, Born in Viareggio, 16-07-1977. Electronic Engineer, graduated in Pisa University in 2006, working in the Fire Protection Industry from 2006, first with Clean Agent systems then involved in watermist business since 2011. Currently, Senior Project Manager at Ultra Fog following several marine projects, especially cruise vessels.. In 2020 he is nominated director for Transport business segment, that includes Watermist protection of Tunnels, Trains, Buses and Metro.

Abstract

With the increasing complexity and utilization of tunnel infrastructures globally, ensuring their safety against fire hazards has become paramount. This presentation delves into the critical role of water mist fire suppression systems in enhancing tunnel safety, supported by the latest findings from comprehensive full-scale fire tests.
In this session, we will present the outcomes of a series of full-scale fire tests conducted in various settings. These tests evaluated the performance of water mist systems in real-world scenarios, considering factors such as fire size, tunnel geometry, ventilation conditions, and system activation times.
KEYWORD: water mist systems, tunnel, Solit 2, full scale fire test.