

FIRE BUYER INTERNATIONAL

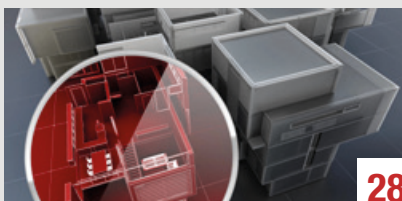
THE **ACTIVE** AND **PASSIVE** MARKET LEADER



THE BIG INTERVIEW

12

Max Lakkonen, the new President of the International Water Mist Association



28

Alarms

Trends, challenges, and emerging technologies in alarming commercial buildings



36

Foams

Tailoring foams for unique challenges in industrial and municipal fire protection



56

Training

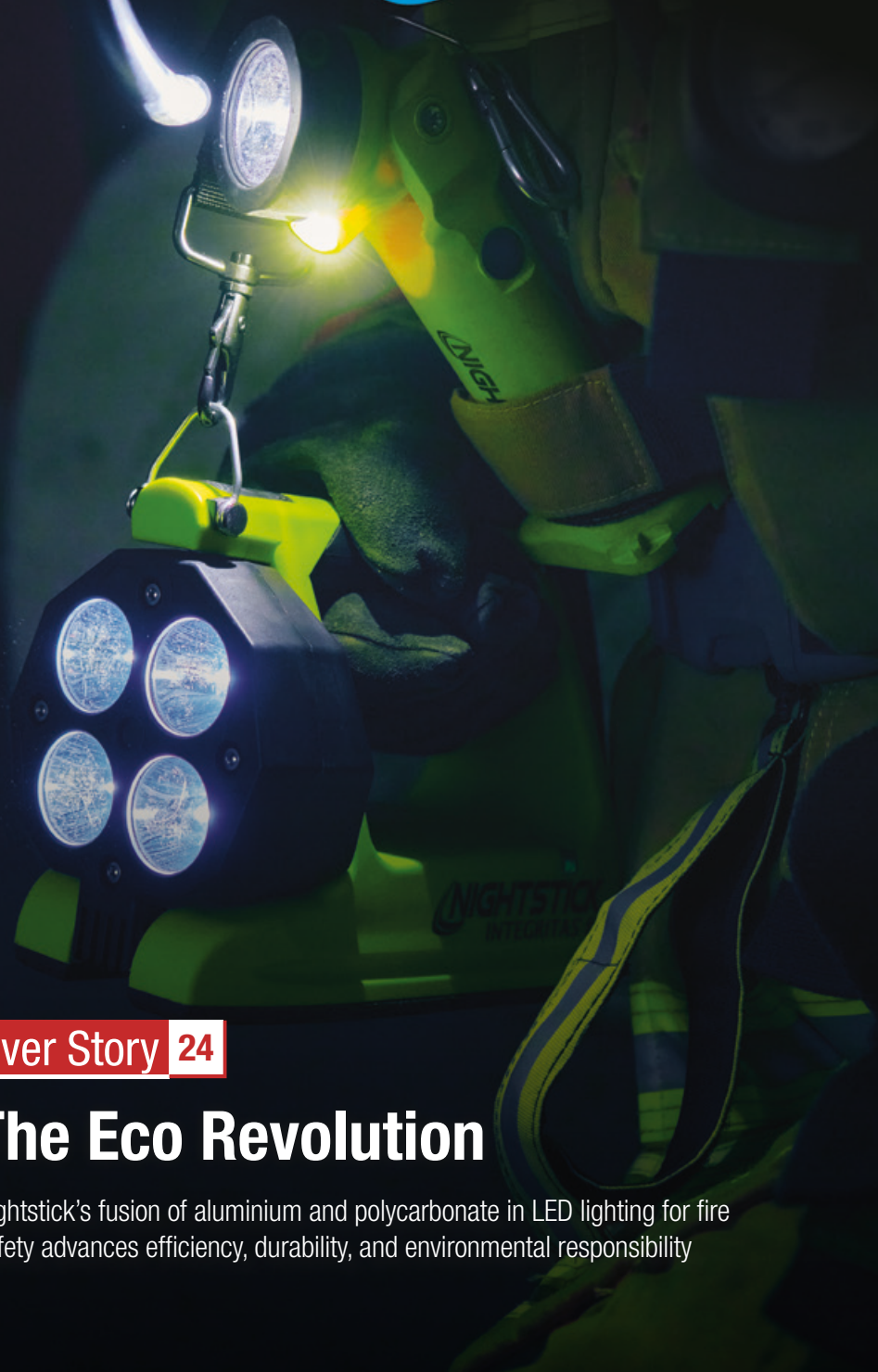
International collaboration between firefighter training centres

Cover Story 24

The Eco Revolution

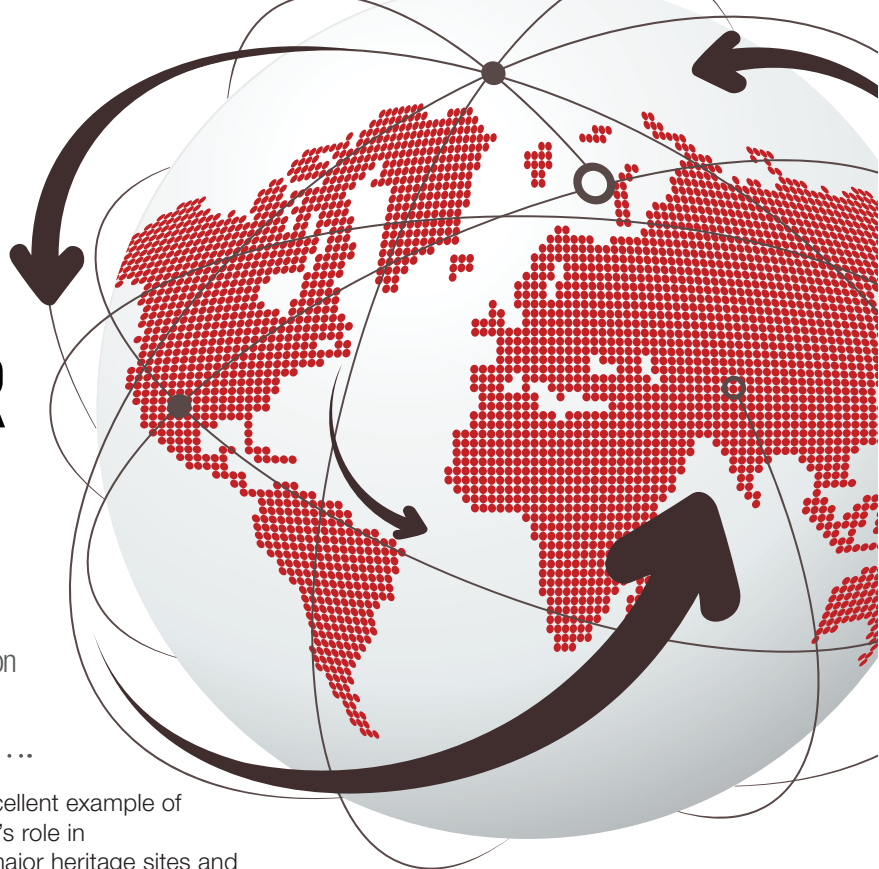
Nightstick's fusion of aluminium and polycarbonate in LED lighting for fire safety advances efficiency, durability, and environmental responsibility

NIGHTSTICK



A NEW ERA FOR WATER MIST TECHNOLOGY

As he steps into the role of IWMA President, Max Lakkonen shares his vision for water mist technology—a fire suppression solution reshaping the industry



CONGRATULATIONS ON YOUR NEW ROLE AS PRESIDENT OF THE IWMA. HOW DO YOU FEEL ABOUT TAKING ON THIS LEADERSHIP POSITION AT SUCH A PIVOTAL TIME FOR THE INDUSTRY?

Thank you! I'm excited to step into this role as water mist technology continues gaining recognition as an eco-friendly, versatile fire suppression solution. Having followed the industry's growth for over 20 years, particularly in Europe, I'm thrilled to see it emerging globally as one of the key technologies in fire protection. Currently, the market value of mist technology is measured in billions of euros at end-client prices.

Leading IWMA now is both an honour and a chance to help drive advancements, expand industry knowledge, and support the continued growth of our field.

YOU HAVE BEEN PART OF IWMA SINCE 2005 AND PREVIOUSLY LED THE SCIENTIFIC COUNCIL. HOW HAS THE ASSOCIATION DEVELOPED OVER THIS TIME?

The IWMA has evolved significantly since 2005. Initially, our focus was on raising awareness and demonstrating the effectiveness of water mist systems across various applications. Today, water mist is a well-established technology that even dominates certain market sectors. For instance, nearly all cruise liners, large data centres, numerous road tunnels, and many complex buildings with diverse hazard classifications are protected by water mist. I recently heard that Notre Dame will also be protected by water mist following its unfortunate fire incident,

which is an excellent example of the technology's role in safeguarding major heritage sites and areas sensitive to water damage.

As the industry has grown, so has IWMA, though not always at the same pace in terms of membership. Now, however, we are seeing an increasing number of new member applications. IWMA provides a valuable networking platform for all organisations involved with water mist firefighting. Additionally, IWMA actively promotes best practices, information sharing, and training. Today, IWMA is also far more professional and organised than it was 20 years ago.

WHAT KEY PRIORITIES WILL YOU BE FOCUSING ON DURING YOUR TENURE AS IWMA PRESIDENT?

My top priority is enhancing IWMA as a knowledge hub while fostering stronger networking within the fire protection industry. I aim to broaden our global reach and deepen collaboration with national fire and sprinkler associations, regulatory bodies, and industry leaders. Expanding training, raising awareness of best practices, and developing educational programmes will be important, especially for designers new to working with water mist. Lastly, I want to increase IWMA's visibility; while the water mist industry has grown substantially in recent years, IWMA's presence has room to grow accordingly.

HOW HAS WATER MIST TECHNOLOGY EVOLVED IN RECENT YEARS, AND WHAT NEW ADVANCEMENTS ARE YOU MOST EXCITED ABOUT?

Water mist technology has seen

remarkable development. Initially used mainly in marine applications, today it's found in commercial, industrial, and residential applications worldwide. I'm particularly impressed by how quickly the industry has adapted water mist for lithium-ion battery applications, whether for electric vehicles, energy storage systems, or battery manufacturing. The technology's ability to adapt to new hazards, backed by rigorous fire testing and performance-based design (PBD), is proof of its versatility and adaptability.

WATER MIST HAS BEEN GAINING TRACTION AS A VIABLE FIRE SUPPRESSION SOLUTION FOR A NUMBER OF YEARS. HOW DO YOU SEE ITS RECEPTION CHANGING ACROSS DIFFERENT SECTORS? AND DO STANDARDS AND REGULATIONS IMPACT THIS?

We're seeing broader acceptance across multiple sectors, as water mist's ability to control and extinguish fires with minimal water use makes it appealing for industries that prioritise environmental sustainability and minimal property damage. Regulatory frameworks and standards play a significant role in shaping this reception. Today, we have more standards available than ever, with the recently published EN14972 framework being a cornerstone for Europe. Additionally, there are many standards by FM, UL, and VdS. Standards and regulatory recognition help increase confidence among end-

users, enabling them to choose water mist knowing it's proven effective, compliant with established safety requirements, and satisfying authorities as well.

WHAT DO YOU CONSIDER TO BE THE BIGGEST CHALLENGES FACING THE FIRE INDUSTRY TODAY, AND HOW DO YOU PLAN TO ADDRESS THEM AS PART OF THE IWMA?

One significant challenge is the shortage of fire protection professionals, especially those trained in water mist. The rapid growth of this technology demands more qualified engineers, designers, and technicians, particularly in regions experiencing high growth in water mist adoption. Water mist systems are somewhat more complex, with design parameters varying by manufacturer, which can add to the learning curve. Expanding IWMA's educational programmes and outreach, especially targeted at young professionals and universities, will be essential to closing this skills gap.

Another challenge is the fire industry's conservative nature and preference for traditional systems, like sprinklers and gas-based suppression, due to their long-established presence. The fire protection industry can be slow to adopt new technologies, and water mist is often still perceived as novel. However, it's time to shift this perception, as water mist has been commercially viable for over 30 years, proving its maturity as a reliable technology. Educating stakeholders on its benefits and dispelling myths about its novelty or complexity will be important for achieving broader adoption.

IN YOUR VIEW, HOW DOES WATER MIST COMPARE TO MORE TRADITIONAL FIRE SUPPRESSION METHODS IN TERMS OF EFFICIENCY, SAFETY, AND ENVIRONMENTAL IMPACT?

Water mist offers several distinct advantages over traditional methods. Its fine droplet size enables faster cooling and better

penetration in confined spaces, and it generally uses less water than sprinklers, making it ideal for applications where minimising water damage is critical. However, some applications still favour sprinklers, with their potentially better commercial value for the investment (although initial activation and damage considerations might balance this comparison). With its small droplets, water mist technology also provides technical benefits that can replace traditional gaseous systems, which are often less favoured due to environmental concerns.

In terms of safety, water mist is non-toxic and safe for people, making it suitable for occupied areas, unlike gaseous systems, which typically require closed spaces and occupant evacuation. Environmentally, water mist systems are highly eco-friendly due to their reduced pure water usage and minimal disposal requirements. These advantages align closely with modern sustainability goals, making water mist a compelling choice for fire suppression.

WHAT ROLE DO YOU SEE INNOVATION AND RESEARCH PLAYING IN THE FUTURE OF WATER MIST SYSTEMS, AND HOW WILL THE IWMA SUPPORT THESE DEVELOPMENTS?

Innovation and research are essential to the continued growth of water mist technology. IWMA is dedicated to advancing these areas by supporting research initiatives and expanding our knowledge-sharing platforms. By building stronger partnerships with academic institutions, regulatory agencies, and industry experts, we aim to keep IWMA members at the cutting edge of new advancements. Our annual IWMA conference serves as an excellent platform for researchers and industry professionals to network and exchange insights. Additionally, we promote academic research by awarding the Ragnar Wighus prize each year for the best Master's or Doctoral thesis related to water mist. This recognition hopefully motivates students and researchers to pursue projects that drive the field forward.

ANYTHING ELSE TO NOTE?

Yes, I want to emphasise again that my goal as president is to actively engage both our current and new members. By fostering collaboration and promoting collective growth, IWMA will play a pivotal role in shaping not only the water mist industry but also the future of fire protection. I strongly encourage readers to join IWMA and especially attend our main annual event, the IWMA Conference, taking place next September in Manchester, UK. More information is available at [www.iwma.net] (<http://www.iwma.net>). **FB**



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