The Growth in the Use of Liquids for Anti-icing and De-icing in Europe

By
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Presentation
• Brief introduction about myself
• Background information on the UK & Europe
• How we operate
• The Need for Change
• Research & Development
• The Future

Introduction
Mark Dutton, Managing Director of Safecote
22 Years in winter maintenance
15 Years working for Salt Union Limited, Part of Compass Minerals
2 years for Peacock Salt
Started with Safecote – July 2004

United Kingdom

UK Statistics
• UK is 153,000 sq miles
• Population of over 66,000,000
• Over 242,300 miles of road
• Motorways less than 1% (19% of traffic)
• 1980 to 2005, traffic increased by 81%
• Congestion charging in London has reduced traffic by 18% since 2003
UK Climate

- Climate is strongly influenced by the sea
- Summers are cool and damp. Winters mild
- Gulf stream from Mexico keeps waters warm
- West coast is far wetter than the East due to Atlantic air flows
- Two back-to-back record breaking winters
Facts & Figures

- 50 countries in Europe (a growing continent)
- Population estimated at 700 million
- The climate of Europe varies from subtropical to polar
- Every European country has a defined winter maintenance strategy
Winter Maintenance in Europe

- Individual countries have individual standards
- Much more adoption of pre-wetted salt than UK
- Higher purity salts than UK — much more costly
- Small amount of direct liquid de-icing
- Trialling additives in brine for longevity & corrosion inhibition
Testing in Europe

- SaltSmart project in Norway that is recognised across Scandinavia
- Investigating distribution performance and residual levels of de-icers
- Researching both chloride and non-chloride de-icers
- Initial work is positive for direct liquid application – further enhanced with ABP additives

Testing Europe (cont)

- German winter research group with BAST reviewing pre-wetted salting
- Residual results are not as expected
- Driving research towards direct liquid for anti-icing
- Initial trials of this are very positive
- Group now looking at ABP additives also
The Future

• Liquid for anti-icing & solid for snow??
• How to measure residual salt?
• Litigation?
• Reduce environmental impact
• Reduce corrosive impact
• Assess the impact of global warming!!
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