




2 Tunnel (터널)

 <p>히드로 공항 터널</p>	<p>2.1 London Heathrow Airport, London (England)</p>
	<p><i>Fire-fighting water mist system for tunnel below the northern and southern runways.</i></p>
	<p>Project period: 2016–2017 (under construction) Client: Heathrow Airport Limited</p>
	<p>Project description:</p> <ul style="list-style-type: none"> – Improving the safety and availability of airport operations – Four-tube main tunnel, 625 m long, below northern runway – Single-tube cargo tunnel, 920 m long, below southern runway – CFD analysis, including validation through real-life fire tests


 <p>터널 (510 m)</p>	<p>2.2 ASFINAG Tunnel Liefering, Salzburg (Austria)</p>
	<p><i>Fire-fighting water mist system for protecting the driving routes in both tunnel tubes.</i></p>
	<p>Project period: 2016 Client: ASFINAG</p>
	<p>Project description:</p> <ul style="list-style-type: none"> – AQUASYS provides protection for the tunnel in the Salzburg metropolitan area, a major transport hub with more than 90,000 vehicles travelling through it every day – Two tubes with three to four driving lanes in each – Tunnel length: 510 m


 <p>터널 (14 km)</p>	<p>2.3 ASFINAG Arlberg Tunnel, Tirol (Austria)</p>
	<p><i>Fire-fighting water mist system for Austria's longest road tunnel.</i></p>
	<p>Project period: 2014 Client: ASFINAG</p>
	<p>Project description:</p> <ul style="list-style-type: none"> – World's largest water mist installation in the road tunnel sector – Protection of the only winterproof east-west transport link between Tyrol and Vorarlberg – Protection of the two-lane bi-directional tunnel and the escape tunnels – Tunnel length: 14 km


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 <p>터널 (1,311 m)</p>	<h2>2.4 ASFINAG Bregenz City Tunnel, Vorarlberg (Austria)</h2>
	<p><i>Fire-fighting water mist system to prevent vehicle fires in the Bregenz City Tunnel</i></p>
	<p>Project period: 2014 Client: ASFINAG</p>
	<p>Project description:</p> <ul style="list-style-type: none"> – Protection of the bi-directional tunnel in the centre of Bregenz – Improved safety for 16,000 vehicles per day – Tunnel length: 1311 m – 3300–4300 litres of water per minute

 <p>터널</p>	<h2>2.5 Gleinalm Tunnel, Styria (Austria)</h2>
	<p><i>Smoke gas cooling with high-pressure water mist for a vital traffic link between Leoben and the Graz region.</i></p>
	<p>Project period: 2009 Client: ASFINAG</p>
	<p>Project description:</p> <ul style="list-style-type: none"> – Smoke gas cooling in the exhaust duct of the tunnel ventilation system – Protecting the tunnel ventilation system against overheating – Especially fine water mist for an optimum cooling effect

 <p>터널 (2,450 m & 450 m)</p>	<h2>2.6 Roertunnel and Swalmentunnel, Roermond (Netherlands)</h2>
	<p><i>Stationary fire-fighting system for safeguarding transport loads of the highest hazard class.</i></p>
	<p>Project period: 2007 Client: Volker Wessels</p>
	<p>Project description:</p> <ul style="list-style-type: none"> – Protection of the Roertunnel and Swalmentunnel as important interchanges with the German transport network – Roertunnel: 2450 m, longest road tunnel in the Netherlands – Swalmentunnel: 450 m long – Both tunnels have two lanes – A total of three pump rooms

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2.7 Felbertauern Tunnel, High Tauern (Austria)

Fire protection with water mist for one of the most important north-south transport links in the Alps.

Project period: 2005
Client: Felbertauernstraße AG

Project description:

- Protection of the tunnel tubes, measuring 5.3 km in length
- Protection of the tunnel construction and implementation of measures to prevent fire spreading from a burning vehicle to other vehicles
- 8000 nozzle heads and approx. 20 km of stainless steel pipe installed

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터널
(4 km)

2.8 Øresundsbron Tunnel, Copenhagen/Malmö (Denmark/Sweden)

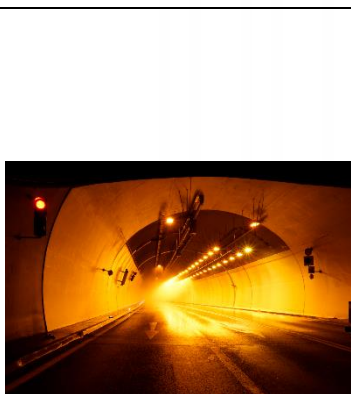
Fire protection with water mist for one of the most important north-south transport links in the Alps.

Project period: 2005–2006
Client: Øresundsbro Konsortiet

Project description:

- Protection of the cable ducts in the 4-km-long tunnel
- Improved safety for the some 20,000 daily users of this transport link

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터널
(800 m)

2.9 Mona Lisa Tunnel, Linz (Austria)

Water mist protection for central urban tunnel that provides a transport link to Linz's industrial zone

Project period: 2003–2004
Client: ELIN GmbH & Co KG

Project description:

- Protection of the driving route through the 800-m-long tunnel
- Tunnel routed below the railway links of the Western Railway and the tramway
- Improved safety for 22,000 vehicles per day

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