



# FL8SAFE – the special coating for runways and landing strips

## THE PRODUCT OF DECADES OF DEVELOPMENT

A special coating that optimises airport runway utilisation, ensures maximum safety and takes environmental protection into account – this is FL8SAFE.

It reduces the risk of aquaplaning and improves the directional stability of aircraft. The asphalt coating retains its antiskid properties even in light snow and hoar frost. It also reduces the rubber abrasion left in touchdown areas of runways and landing strips. More effective utilisation, lower maintenance requirements and longer service life compared to conventional coatings ensure excellent cost-effectiveness and sustainability.

There is a long tradition behind FL8SAFE: in 1968, a NASA conference determined the essential properties of aircraft runways to guarantee the highest level of safety. The founder of POSSEHL Spezialbau, Walter Symmangk, subsequently developed the special coating ANTISKID, from which FL8SAFE was developed. The product exceeds all regulatory requirements.

Walter Symmangk develops the special coating ANTISKID; ANTISKID coating at Soesterberg military airport (NL) ANTISKID coating installed at entire aviation hub of Amsterdam Schiphol BRRC Brussels demonstrates the reduced need for deicing agents with the use of ANTISKID

# Optimal conditions

To respond to the increasing demands in the aviation industry, all technical possibilities need to be explored. In the air, state-of-the-art aircraft enable take-offs and landings in practically all weather conditions. On the ground, FL8SAFE ensures optimal conditions on runways and landing strips.



# **DURABILITY**

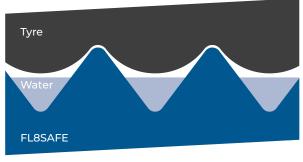
The durable coating can prevent aggregate from coming loose and causing damage to engines. The dreaded *foreign object debris* (FOD) is prevented.

## **OUTSTANDING GRIP**

Thanks to the outstanding grip properties of FL8SAFE, rubber abrasion left in touchdown areas of runways and landing strips is reduced by up to 40 per cent.

#### **INTERNATIONAL GUIDELINES**

FL8SAFE is produced in accordance with the guidelines of the *ICAO Aerodrome Design Manual* and with the requirements of the *Advisory Circular* from the US Federal Aviation Administration (FAA) for the design of antiskid coatings.



## **COATING STRUCTURE**

On wet runways, friction loss is minimised, rolling resistance is maximised and directional stability is improved. Thanks to the coating structure, icing is slower to occur and ice can be cleared away more quickly.

#### MICRO AND MACRO TEXTURE

The relationship between micro and macro structure ensures that water can flow off more easily. The risk of aquaplaning is reduced, while the directional stability of aircraft is improved.

First EP ANTISKID coating installed overnight at Dortmund Airport (no disruption to regular flight operations)

Introduction of the new, improved product under the new brand name FL8SAFE; Development of specific deicing material for FL8SAFE

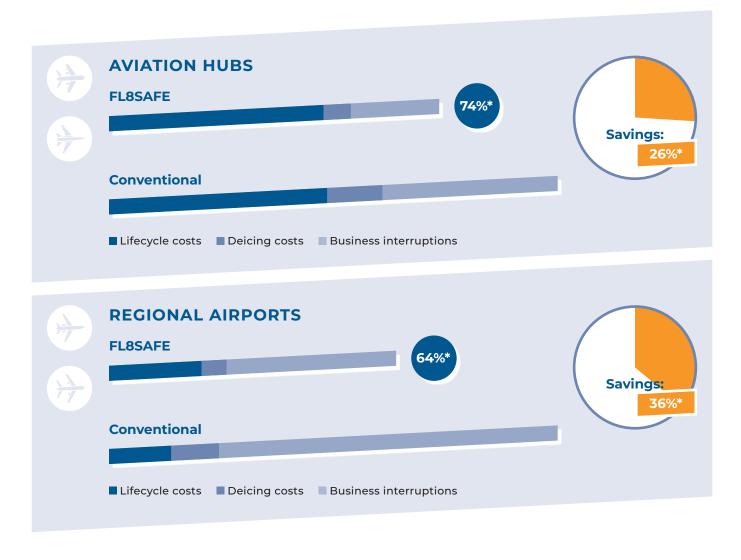
2023

# Profitable, safe, sustainable

Runways and landing strips are exposed to extreme conditions – aircraft impact, weather conditions, fuel effects, jet engine blasts, exhaust gases and deicing activities accelerate wear and tear of the surface. This is where the benefits of FL8SAFE come to the fore.



Runway surfaces coated with FL8SAFE have a significantly longer service life compared to conventional runways. This means: more efficient total cost of ownership thanks to optimal substance maintenance. The need for liquid deicing agents is reduced by up to 50 per cent compared to conventional surfaces.





Shorter runway occupancy times enable a higher volume of flight movement and allow airports to increase utilisation levels. Thanks to the high load capacity of the coating, service life is extended and less maintenance work is required. Thanks to FL8SAFE, icing is also slower to occur and ice can be cleared away more quickly, which, in turn, increases availability.



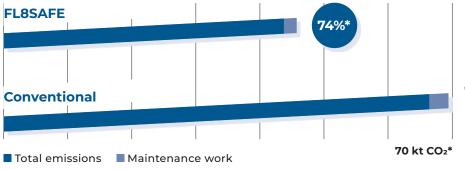
FL8SAFE exceeds all requirements for international aviation, including the specifications of the EASA, the ICAO and the FAA. This prevents aquaplaning, as surface water can flow away unhindered. Braking distance is shortened and damage caused by dreaded 'foreign object debris' (FOD) can be avoided.

# **★☆** QUALITY AND EXPERTISE

POSSEHL Spezialbau has over **50 years of expertise** in the development of its special coating. To date, more than 20 million m<sup>2</sup> of the coating have been installed at almost 100 leading airports of all sizes around the world. The air forces of numerous countries are also enjoying the benefits of FL8SAFE.

# ENVIRONMENTALLY FRIENDLY

For runways and landing strips with a service life of 50 years, FL8SAFE reduces CO<sub>2</sub> emissions by around 26 per cent. The use of liquid deicing agents is also reduced by 50 per cent. FL8SAFE is recyclable, has been free of nonylphenol since 2022 and contains an evergrowing amount of renewable materials.



1,000 beech trees would need to grow for 80 years to absorb one kiloton of



\* An average service life of 50 years is used as the basis for the calculation.

Source:



# Areas of application

Billions of passengers travel through airports around the world each year. This is a challenge for airport operators, as runways and landing strips need to be serviced and maintained regularly to keep them safe for traffic. On top of this, cleaning, expansion work and upgrades are also required. These are all phases during which runways cannot be used or can only be used to a limited extent. FL8SAFE helps to minimise these downtimes and improve utilisation.

To date, POSSEHL Spezialbau has installed over 20 million m² of its high-tech coating on runways and landing strips at almost 100 airports around the world – including at aviation hubs, regional airports, military airfields and airports used for premium aviation. The high quality of the material ensures reliable, lasting protection of the runway surface against stress, improves braking efficiency and ensures better substance maintenance, which extends the service life of the runway.



## **AVIATION HUBS**

FL8SAFE helps to routinely handle a high volume of flight movement at airport hubs. Less maintenance work is required, downtime is reduced, and flight delays due to extreme weather conditions occur less often. This enables airport operators to plan ahead more efficiently.





# **PREMIUM AVIATION**

FL8SAFE enables the highest level of individual planning. Thanks to its outstanding properties, runways and landing strips can be cleared even in adverse weather conditions. In addition, less frequent and shorter maintenance times mean that take-offs and landings can be planned reliably.





# **REGIONAL AIRPORTS**

Due to the shorter runways and landing strips at regional airports, airlines need to reduce their payload by 15 per cent in certain weather conditions – as dictated by safety regulations. With FL8SAFE, runways and landing strips will remain sufficiently antiskid to be considered dry up to a certain level of wetness (dry when wet), so these restrictions will not apply.





# **MILITARY AVIATION**

Runways and landing strips need to be available in a matter of minutes. FL8SAFE enables runway downtime to be kept extremely low. Thanks to its high durability and heat resistance, FL8SAFE reduces the risk of foreign object debris (FOD), whereby parts of heavily used coatings can come loose and cause damage to engines.



# **GET IN TOUCH.**

Questions? Would you like a personal consultation?
Please contact us now. Our experts are here to help you.

✓ info@fl8safe.com

www.fl8safe.com

# **Innovation**

## **IDEAS FOR THE FUTURE**

The experts at POSSEHL Spezialbau always have their finger on the pulse. We track the latest developments in airport runway technology. Whether it's technical advancements or innovative operator models, we are constantly looking for new ideas that will benefit our customers. Our goal is to offer an all-inclusive package comprising all services from planning to installation and maintenance of high-quality runways and landing strips - we like to call it 'runways as a service'!

# Contact

# WE'RE HERE TO HELP

FL8SAFE is produced by POSSEHL Spezialbau GmbH, which has been involved in the value-preserving maintenance of roads, industrial spaces, operating areas and airport runways since 1956.

Questions? We'd be happy to help! Let's talk about how we can bring all the strengths of FL8SAFE to your specific project.

# YOUR CONTACTS

## **Germany / Austria / Switzerland**



**Michael Dirschedl** Area Manager

- **L** +49 (0)6701 20 44 926
- +49 (0)173 57 18 618
- m.dirschedl@possehl-spezialbau.de

#### **International**



Erik de Leeuw Area Manager

- **L** +31 (0)88 50 54 033
- +31 (0)653 17 42 88
- e.leeuw@possehl.nl

#### **Scandinavia**



Jesper Gyllenstig Sales

- **\ +49 4331 43663 17**
- +49 151 4610 9733
- ☑ j.gyllenstig@possehl-spezialbau.de

#### Poland



#### **Aleksander Glowacki**

- Sales
- **\ +49 1520 9328579**
- +49 30 6765988
- a.glowacki@possehl-spezialbau.de

FL8SAFE is a brand of:

