

# Runway preservation at Hawarden Aerodrome

In September 2009, Colas carried out 82,000m<sup>2</sup> of runway preservation at Hawarden Aerodrome. This process and associated runway markings took place over a weekend and, in less than 72 hours, the runway was fully operational.

The preservation process offers an extended pavement life of between three and five years and is the ideal solution for Hawarden Aerodrome.

#### Reduced costs

40% reduction in new asphalt

56% reduction in planing

29% reduction in energy consumption

28% reduction in CO<sub>2</sub>

49% reduction in lorry movements on local roads

10 days of night works to complete the runway



#### Project Details

Colas were approached by Hawarden Aerodrome who were experiencing problems with the runway surface which was showing signs of degradation of the runway and posing a potential maintenance issue. The programme was also a challenge with access to the runway being limited to weekends and nights. Colas considered several options to meet the challenges presented by Hawarden Aerodrome and offer the right solution to achieve their objectives.

Initial thoughts looked at potential surfacing options, including Colas' Repave hot in-situ recycling process but, as the runway surface was in relatively good condition, this was not the right solution for Hawarden Aerodrome. It was decided to investigate the potential to carry out preservation instead.



Following several trials of both preservation and rejuvenation materials. ASI's Rhinophalt preservation material was selected as the best solution.

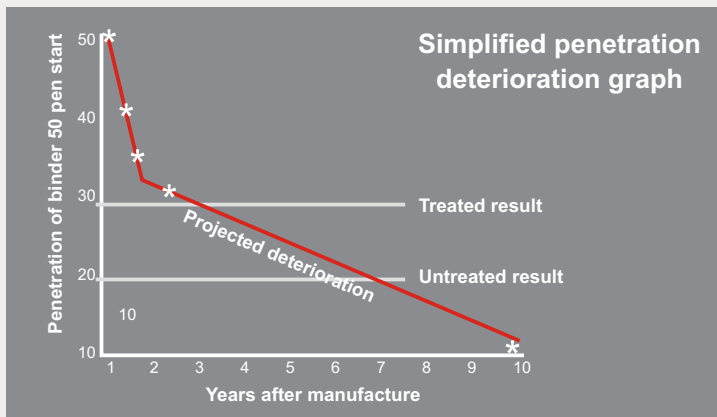
The Rhinophalt material is a solvent based solution made with Gilsonite. The preservation material is applied to the surface of the runway, and allowed to penetrate into the binder. This stabilises the binder and stops any further degradation. This process is designed to stop further oxidation of the existing pavement and preserve the

existing asphalt for between 3-5 years. A further preservation can then be applied extending the life further.

The whole runway was preserved in less than 72 hours, an amazingly quick programme, beneficial to any client wishing to minimise the impact of maintenance work on their flying operations.

**“We feel that the scheme has been a complete success and that the product and the process provided have achieved the desired solution for the client.”**

**Simon Downing, Airfields Manager**



**Simplified penetration deterioration graph**

*Shows the deterioration over time of the pavement both untreated and treated with the preservation process.*

Colas Limited, Wallage Lane  
 Rowfant, Crawley  
 West Sussex RH10 4NF  
 T: 01342 711000  
 F: 01342 711199  
 E: info@colas.co.uk