CASE STUDY

CLIENT

Glasgow Prestwick Airport was purchased by the Scottish Government in November 2013 to protect jobs and safeguard a strategic infrastructure asset. The airport operates as a commercial business at an arm's length from the Government. There are approximately 290 staff working across areas including business support, passenger handling, cargo, air traffic control, compliance, fire services and a number of other areas, all running of the airport with the view of returning the airport to a position of profit and long-term sustainability.

CHALLENGE

LAML was contracted by Glasgow Prestwick Airport to provide a quick and cost-effective maintenance to slow down FOD creation on a couple of their serviceable but aging asphalt aprons.

LAML was on site undertaking an effective, minimally disruptive life-extending asset maintenance project with asphalt preservation followed by overbanding the most open cracks in their ageing apron surface.

The airport was having to deal with aggregate loss and associated FOD issues following frequent rainfall in this part of the country. LAML treated approximately 23,000m^2 of the surface on two of the key aprons used primarily for parking and holding military and cargo aircraft. The preservation works were completed in one day shift with minimal disruption to airport and aircraft operations. We returned a couple of weeks later for three shifts to carry out over-banding of the very worst of the larger existing cracks in the treated areas using our cimline machine and overband lance.

LAML.Ltd
enquiries@laml.ltd
+44 (0)78 2694 0909

Asphalt preservation works by protecting the asphalt surface from weathering, oxidation and traffic wear. RHiNOPHALT® protects the existing surface course, specifically the bituminous binder and seals in existing oils and resins whilst at the same improving the binding and waterproofing properties of the surface. One application on older asphalt surfaces can extend pavement life by an additional 3 to 5 years, delaying the massive cost and disruption of a resurfacing intervention. A RHiNOPHALT® treated surface becomes more resistant to abrasion, stone loss, and the severe ageing effects of ultraviolet light and water.

By minimising the occurrence of cracking, crazing and potholes, RHiNOPHALT® provides significant life extension to the surfacing course, thereby delaying the need for major resurfacing interventions.

Cracking results in potential weak points in the surface that allows water or even fuel spillage ingress below the surface and with the changing temperatures and freeze-thaw effect, this can cause further delamination, cracking, and aggregate loss – all of which can cause FOD risks in the airside environment as well as the need for reactive maintenance.

Overbanding was used to seal the larger cracks which prevents further water ingress and slows down the process of additional fretting.

RESULTS

The airport has confirmed that following the preservation treatment FOD sweeps are showing no further aggregate loss. The airport is considering further use of preservation materials.