



Runway Extension to Improve the Choice of Holiday Destination

Leiths (Scotland) Ltd is a long established family company based in Aberdeen, which has enjoyed significant growth over the past 20 years. At Leiths, we offer a diverse range of products and services, and are one of Scotland's largest privately owned quarrying and civil engineering businesses. Leiths (Scotland) Ltd has 6 subsidiary companies, giving the Leiths



Group an extensive resource, including 16 quarries; over 500 employees and extensive haulage and plant fleets to create an integrated, quality assured materials and construction group servicing the construction industry across Scotland.

In 2009, Leiths, in conjunction with BAA and the client, started the process of asphalt mix design and supply for the Runway overlay and have just returned to complete the

Runway extension. The extension will allow larger aircrafts and payloads to provide passengers with the service to further destinations for business and pleasure. This project was interesting and onerous from a manufacturing and performance point of view. The reason being to comply with the performance requirements, the asphalt had to be able to take runway traffic a few hours after being laid. Therefore, Leiths had to understand the physical properties which would be required and use this knowledge to mix an appropriate product.

The asphalt surface has to be smooth and free from any openess to avoid any durability issues within the design life. The laying and compaction process is tightly controlled in order to achieve the correct density and texture of the finished surface.

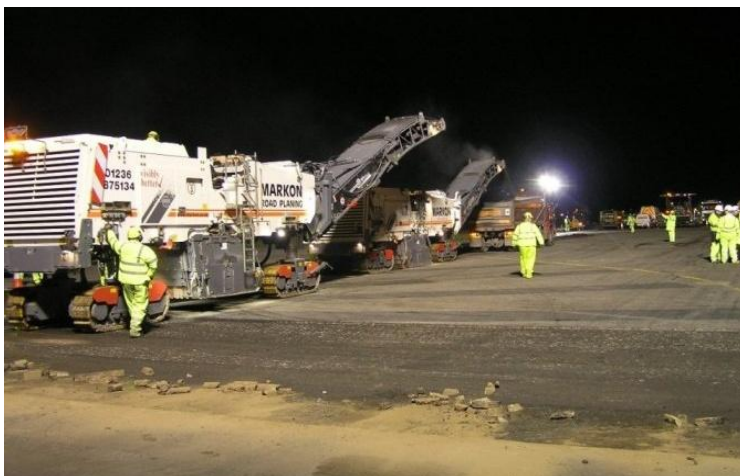
In order to improve the skid resistance in wet conditions, the surface of the asphalt had to be grooved. The reason for runway grooving is that it is an effective means for improving grip during aircraft operations under adverse weather conditions.

This process can only take place some days after the surface had been laid. In the meantime, the ungrooved surface had to satisfy early life skid resistance. This was achieved by the use of aggregates with certain physical polishing properties. The aggregates in question were imported from a Leiths quarry near Peebles.

Leiths produced the required asphalt in our plant at Cove, Aberdeen and was transported to the airport in controlled amounts restricted by air traffic during the nightshifts (21.00-03.30 hours).

Once all the site and plant trials had been carried out to the satisfaction of BAA, samples of asphalt were taken at random to ensure that a consistent material was produced. The Contract Specification parameters were much tighter than those normally applied for typical road construction. The testing requirements of the Contract were met by joint testing with the Client in Leith's UKAS accredited laboratory at Cove.

Both BAA and our Client expressed their satisfaction with the asphalt product. Roy Thomson BAA project manager stated, ***“The Client (with BAA Aberdeen) had to maintain full operational status throughout the runway refurbishment. In this instance the friction characteristics had to be maintained above the minimum requirement to avoid promulgation of “slippery when wet during construction. Leith’s fully acknowledged this requirement and undertook a series of trial mixes before work commenced on the runway – ensuring that business and project risks were minimised. Excellent quality control and delivery was maintained by Leith’s, ensuring that all material laid was fully compliant throughout the project without any business interruption”.***



Leiths (Scotland) Ltd also carried out associated Taxiway road surfacing works. Markon Limited (subsidiary of Leiths (Scotland) Ltd) completed the nightly planing to facilitate the surfacing works.

For any enquires please contact:

businessdevelopment@leiths-group.co.uk