

## Project Profile - Heathrow Airport, Taxiway rehabilitation

The Project - Cracking and Seating of outer taxiway adjacent to southern runway.

Client - The Pavement and Infrastructure Team, PIT (a framework partnership between BAA, TPS and Amec).



In 2003 PIT embarked on a research and development programme to investigate new cost effective ways of rehabilitating taxiways. The extensive research programme concentrated on crack and seat which, although tried and tested on highways has never been used on heavily trafficked airfield pavements.

A design model of the cracked and seated pavements was verified by monitoring actual deflections from an evaluation area to allow the team to produce a design capable of withstanding the Heathrow conditions.

PIT were able to draw on the extensive knowledge and experience of **Antigo Breakers** for the crack and seat operations from as early on as October 2003, to ensure that the right team were in place to deliver a successful project.

On 21<sup>st</sup> June 2004 crack and seat works commenced to form part of the preparatory works to allow the Airbus A380 to operate at Heathrow.

It was the task of **Antigo Breakers** to coordinate and deliver a complete crack and seat package including FWD testing.

Using the most modern 8600 Guillotine breaker, hairline vertical cracks were introduced to the existing pavement to form small platelets that change the way it behaves allowing a significantly reduced thickness of asphalt to be laid when compared to traditional overlay construction. Estimated savings when compared against traditional PQ construction are 25% with a contract duration saving of 16% and a 90% reduction in construction traffic because material removed and imported is hugely reduced by using the crack and seat method.

