

Ringway

Surface texture restored

Skid resistance is being restored to racetracks, runways and roads using TrackJet – Ringway’s newly upgraded high water pressure surface retexturing machine.

Superbike riders at Donnington Park can attack the circuit’s twisting corners with confidence again following the latest use of Ringway’s high water pressure TrackJet retexturing machine. Areas of the circuit described by competitors as ‘slippery’ have been treated, restoring surface texture and skid resistance to one of the UK’s highest profile asphalt surfaces.

TrackJet has been successfully used to retexture many of the UK’s runways, and highways in Scotland and southern England, as well as Donnington Park and other racetracks. The retexturing vehicle has been upgraded with a new drive system and greater vacuum capacity to improve recovery of water from the surface.

At Donnington Park, rubber deposits left by motorcycle tyres at seven corners of the track had begun to clog the asphalt surface, which led riders to complain about a lack of grip. The TrackJet system was deployed to blast the rubber from voids in the surface and remove

the resulting loose material. Prior to retexturing, Ringway carried out pendulum testing on the surface to identify the extent of treatment needed to restore the desired level of friction and skid resistance.

TrackJet features an oscillating water nozzle and a suction device, fitted to the front of a heavy goods vehicle. Clean water is supplied from an 11,000 litre tank at the rear of the lorry

“TrackJet operates at twice the working pressure and consumes around a tenth of the volume of water compared to conventional equipment.” Rob Gillespie

and powered using a high pressure pump. Water delivery is computer controlled, along with the vehicle’s speed, to ensure detritus can be extracted without causing damage to the surface.

The machine was first introduced to the UK by Ringway three years ago, following discussions with airport operator BAA about how to meet more stringent regulations regarding skid resistance on runways. Rubber deposits left by aircraft tyres on a runway’s ‘touch down zone’ can be of particular concern to airport operators: the runway’s grooved texture can fill with tyre rubber, reducing friction and inhibiting surface drainage.

TrackJet was initially used to clean rubber from the runway at Gatwick and has since been deployed at 11 of the UK’s busiest national and regional passenger airports. Ringway’s Divisional Director for Specialist Treatments Rob Gillespie says: “We typically return to the major airports every six months with TrackJet to clean the surface and restore friction. Similar retexturing machines have been around for many years, but TrackJet operates at twice the working pressure and consumes around a tenth of the volume of water compared to conventional equipment.”

TrackJet has a very effective oscillating nozzle which delivers water at up to 2500 bar of pressure through a ring of jets, each as fine as a human hair. It can be programmed to treat areas between 200mm and 2m wide and it does so in one pass.

Application of the machine has now reached Transport Scotland’s highways and those of many English authorities including Wiltshire, Surrey and Kent where Ringway routinely operates TrackJet. It not only removes rubber deposits from an asphalt surface, but can also clean a highway of general ‘road film’ including spilt fuel and resin

TrackJet operations have now reached principal roads in Scotland and southern England including highways of Wiltshire, Surrey and Kent





Surface texture and skid resistance have been restored at the Donnington Park circuit with TrackJet

from overhanging trees. The machine is also suited to removing excess bitumen from a road surface following a spell of hot weather when binder can ‘fatten up’ and reduce carriageway friction characteristics.

Forward speed of the vehicle during retexturing is typically less than 1MPH, carefully controlled to suit the type of surface the TrackJet machine is working on. A slower speed is chosen to deliver a more aggressive retexturing action – to provide a deeper clean of a surface or to strip painted white lines from a carriageway – and it can now do all this with

enhanced control. The machine’s upgrade has been designed partly to give greater consistency of speed on varying gradients.

Material removed from an asphalt surface by the TrackJet machine is recovered through dedicated pipework and collected in a tank on the rear of the vehicle. The contents are left to settle and the dirty water is siphoned off for removal by a hazardous waste contractor, although Ringway is looking at ways of reusing the grey water at its depots. The dry residue can be specified for a range of low grade construction applications.

“TrackJet is a relatively inexpensive method of restoring friction to a surface and its use can help to protect the country’s stock of virgin stone,” Mr Gillespie adds. “The UK is lucky to have good availability of high quality aggregates, but we have to respect our resources and use them wisely. If an existing surface is still structurally sound, it is often better to retexture it rather than replace it.”

email: info@modernasphalts.com

info@ringway.co.uk

RINGWAY BROADENING ITS RANGE

Ringway has increased its operations in UK airfield maintenance with acquisition of specialist contractor BAR-W Airports. Ringway Airport Services is now responsible for looking after 12 airports north of the border through its broadening range of contracts in the airfields sector. Within this portfolio of work, Ringway will deliver a range of engineering and specialist services, including the TrackJet retexturing operation, with the aim of providing a one-stop-shop opportunity for airport engineers.



TrackJet has been deployed at 11 of the UK’s national and regional airports