

I STEELSURF

REDUCING TRAFFIC ACCIDENTS AND MAKING ROUNDABOUTS SAFER



Heavy goods vehicles were contributing to accidents and the deterioration of asphalt until Harsco developed a proprietary mixture to serve as a durable, anti-skid solution.

“HGVs were spilling fuel upon entering the roundabout, which was leading to increased accidents.”

BACKGROUND

At Doncaster, South Yorkshire, the local authorities had been watching a roundabout section of the highway that had high traffic accident rates. After an investigation, they discovered that a local distribution center nearby was fueling heavy goods vehicles (HGVs), which were then heading straight onto the roundabout after refueling.

These HGVs were spilling fuel upon entering the roundabout, which was leading to increased accidents as well as the deterioration of the asphalt surface. Historically, the local authority had been using a traditional High Friction Surfacing product on the highway, but the material was not as effective as it needed to be.



Material recycled from the steelmaking process used in the production of SteelSurf

THE SOLUTION

In November 2018, the local authorities approached SteelPhalt – part of Harsco’s Metals and Minerals Division which manufactures high performance asphalt products for the UK roadmaking industry – to identify a more durable, safer, long-term solution to this problem.

Working closely with one of Harsco’s bitumen suppliers and using data from the independent Transport Research Laboratories report on SteelPhalt materials, the team developed a proprietary mix of SteelSurf. This mix incorporated a special fuel resisting binder, resulting in a more durable antiskid solution.



The report analyzed a number of different SteelPhalt materials, ages, traffic counts and highway situations, from which Harsco discovered just how well SteelSurf was performing in roundabout applications. Since then, Harsco has been able to promote SteelSurf for roundabout applications, which had never been done previously.

Applying SteelSurf to roundabouts requires no additional or special equipment, as it is installed the same as traditional asphalt material. However, it saves time and costs against high friction surfacing installation.



STATUS



The job was undertaken in November 2018, and since that date there have been

no recorded road traffic accidents.



Harsco has since been reaching out to local authorities and contractors educating them on this new application.

Harsco is also currently considering rebranding SteelSurf for this and several other new applications.

OUTCOME

Applying SteelSurf to this roundabout directly reduced traffic accidents and the deterioration of the roadway in Doncaster, contributing to a safer road for drivers.

For more information on the costs and implementation of this solution, please contact us at hem@harsco.com

MAKING A WORLD OF DIFFERENCE™

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