Cyclopath

WDM USA has developed a specialist machine to check the safety of cycle ways.

The Cyclopath uses tried and tested laser technology to scan the surface of cycle paths to check for rutting, texture depth, changes in the transverse profile and any cracking.

It has successfully completed more than six months of UK trials, in the West Country and in London.

The WDM® Group has more than four decades experience of testing road surfaces and monitoring the safety of UK roads. It is the UK’s leading manufacturer and provider of highway survey and monitoring equipment and is also the UK’s largest survey contractor, serving all government agencies and the majority of local authorities.

The Cyclopath is based on proven technology and is a smaller version of the Company’s successful Road Assessment Vehicle (RAV), which records defects on UK’s roads.

The data collected enables highway engineers to prioritize maintenance work and is also submitted to the UK’s Department of Transport as a measure of road conditions nationally.

In 2012 the Company’s road surveying machines were used to check the London Olympic cycle routes and the Cyclopath is the result of several years of research and development.

It not only records the condition of cycle ways, but is fitted with a forward facing video to produce a visual record of the route being checked.

It also comes equipped with GPS to enable local authorities and other stakeholders to produce an accurate map of the network.

The Cyclopath has been extensively tested on the Bristol to Bath cycle route and in London, checking blue cycle paths.

It produced a Road Condition Indicator score every 10 metres, but weightings and thresholds need to be established on the National Cycle Network to develop a Cycleway Condition Indicator score.

WDM® Managing Director, Chris Gardiner, says: “In recent years, certainly since 2012, we have seen more people getting on their bikes, particularly in towns and cities.

A number of cycle ways have been created, but there’s been no formal approach to making sure the routes are fit for purpose. Cyclopath can help make surfaces safer for cyclists who use them.”
National Cycle Network

The UK’s National Cycle Network was developed by the charity Sustrans, which was launched in Bristol in the 70’s, and covers 14,000 miles across the UK.

It is used by nearly five million people every year and some 27 million of the trips made on the paths are by children going to school.

The responsibility for maintaining cycle ways lies with local authorities, Highways England and other land owners, such as the National Trust, Network Rail and the Canal and River Trust. Sustrans also maintains some of the cycle paths, but there’s no formal system of checking the surfaces are safe to travel on.

Technical Specifications

The Cyclopath has a forward facing camera capturing an image every 16 feet of forward travel during a survey. Images are 1280 x 768, 24bit RGB colour compressed Jpegs, saved as a Windows AVI file.

Other technical specifications:
• Longitudinal surface texture obtained by laser height measurements using 1mm sampling
• Inertial longitudinal profile measurement (min speed 7.5mph)
• Continuous GPS location tracking +-1m
• A 6.5 feet wide transverse profile measurement sampled every 100mm (optional over 20mm) of forward travel. Profile measurement accuracy +-1mm.
• Single drive / survey operator controls system using 1U PC.