Estimation of Stone-loss on network condition surveys by use of multiple texture lasers

By

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ABSTRACT

Precise surface texture has collected by use of multiple texture lasers in minimum 3 up to 5 transversal positions in network condition surveys with Laser RST by Ramboll since over 20 years. The Laser RST is a high performance measurement system with flexible data collection both in real-time as in post-processing of data.

A new methodology to detect possible stone-loss or raveling has been developed by Ramboll. This method has successfully been used for large scale surveys of some 20.000 km yearly in Finland. Ramboll has also performed network surveys in the Netherlands over the years 2006-2012. The road administration has put a request to substitute their current way of stone-loss detection by a new more precise method. The Ramboll methodology of stone-loss detection has now been modified to fulfill the demands in the Netherlands.

This presentation will present the new approach to determine stone-loss that has been developed for use in the Netherlands in condition surveys for the secondary road network.

The same methodology is also under evaluation to be used as in verification of new laid asphalt surface. The purpose of this is to determine the homogeneity of the asphalt layer by use of surface texture and to substitute or decrease the traditional testing methodology by core drilling.

THEME: Pavement Profile Measurements, Pavement Surface Texture and Data Quality Assurance