

Introducing a major advancement in measuring skid resistance and interrelated road surface characteristics, manufactured in compliance with BS 7941-1:2006.



iSAVe

The intelligent **S**afety **A**ssessment **V**ehicle (iSAVe) provides a major advancement in measuring skid resistance and inter-related road surface characteristics. Developed in conjunction with our Swedish partner, ASFT and working under license to the UK Transport Research Laboratory (TRL), ARRB Systems' new Hawkeye iSAVe is manufactured in full compliance with the current British Standard; BS 7941-1:2006.

This system is used to measure the wet skid resistance of defined sections of road surface across a network, in both wheel paths. This helps ensure that an appropriate level of 'grip' is provided throughout. An emphasis is placed on high demand locations, such as the approaches to traffic signals and pedestrian crossings, or around tight curves, where vehicles are typically required to brake and accelerate, sometimes in emergency situations.

A controlled flow of water wets the road surface immediately in front of the test wheel, and the system is capable of collecting continuously for up to 300kms of data at a time (single wheelpath testing), due to the low water flow requirements and large reservoir. The measuring wheel is set at a 20° angle to the forward movement of the vehicle with a known applied load. The sideways force generated by this activity is directly related to the wet skid resistance of the road surface.

MEASURING SKID RESISTANCE AND INTER-RELATED ROAD SURFACE CHARACTERISTICS

Features

- Measurements according to BS7941-1: 2016
- Fully licensed and compliant system
- Data collection in both wheel paths
- Survey range of up to 300kms per water load (single wheelpath)
- Spilt rim design enables rapid change of measuring tyre

Along with the collection of wet skidding resistance, the iSAVe is fitted with sensors capable of collecting:

- Roughness (IRI)
- Rutting
- Macrotexture (SMTD or MPD)
- Asset imagery
- GPS and distance
- Geometry (crossfall, grade, horizontal and vertical curvature)

It is also fitted with the following additional features to minimise measurement variability:

- Dynamic monitoring of the vertical load
- Continuous tyre pressure monitoring
- Dynamic speed controlled water system
- Ambient air temperature monitoring
- Tyre temperature monitoring

Being integrated into the Hawkeye platform allows for the inclusion of additional data collection sensors, which can all be batch processed within Hawkeye Processing Toolkit and uploaded to Hawkeye Insight for efficient data display and investigation.



PAVEMENT MANAGEMENT INTELLIGENCE

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