

Hawkeye 2000 TPR

Transverse Profile & Rutting System



The Hawkeye 2000 Digital Laser Profiler Series now includes an option to use spread laser technology for recording the transverse profile and obtaining rut depth information.

A pair of spread lasers is mounted on the rear of the survey vehicle to generate over 1200 measurement points across a 4 m wide path, thus reducing the effects of vehicle position in lane. An integral camera with each laser is used to measure the deviation between the pavement and a projected straight edge.

The spread laser system provides a high resolution transverse profile every 250 mm of travel at highway speeds. By using this technique, together with the two spread lasers, the number of conventional point lasers required for a full profile analysis is reduced to just two.

The system is used in combination with high resolution point lasers, to also measure longitudinal profile, roughness and macro-texture.

The Hawkeye Spread Laser Digital Profiler weighs significantly less than a conventional front mounted laser profiler beam and is mounted inside the line of the vehicle, which greatly reduces the chance of damage, especially in dense traffic.

A high accuracy Distance Measuring Instrument (DMI) combined with the Hawkeye Heartbeat module is used to precisely lock the data to chainage points along the survey route. The system is also typically linked with GPS or DGPS, geometry instrumentation and video cameras.

Applications

- Network level rutting at highway speeds
- Baseline surveys
- Contract validation



Features and benefits

- Produces left and right Rut Depth outputs
- Collects over 1200 measurement points to ensure accurate results
- High resolution measurement is more tolerant of driver behaviour
- Units do not extend the width of the vehicle
- Less weight on the vehicle
- All data linked to chainage and GPS (optional)
- Low to high speed vehicle operation
- Results are independent of vehicle type
- Measurements possible on all sealed surfaces
- Results are unaffected by tining
- On-board real-time data displays confirming data integrity
- Data can be reviewed, edited and processed within the Hawkeye Processing Toolkit

