

Smart Texture

Road surface macrotexture measurement system

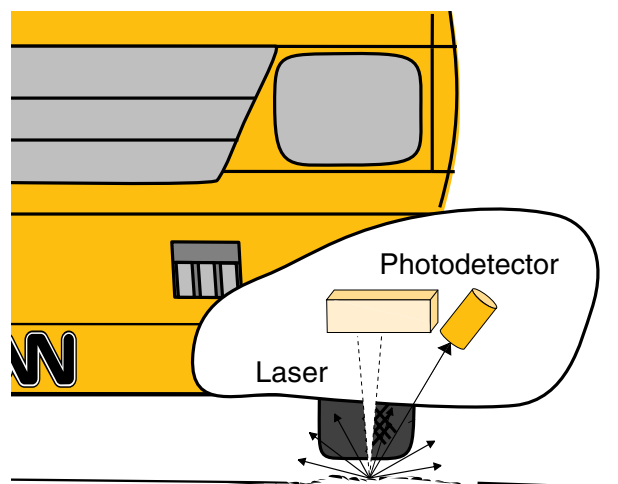
Texture data is an important measure of drainage and skid resistance potential of a pavement's surface. The Smart Texture subsystem is a vehicle mounted module that utilizes high frequency lasers to measure the mean profile depth of road surface macrotexture.

During data collection, the operator can review real-time texture data. Workstation processing enables detailed review of texture profiles or statistical summaries for pavement management applications.

The Smart Texture module consists of one or more 64 kHz lasers, signal conditioning electronics, and a computer. The system can acquire macrotexture at speeds up to 100 km/h (60 mph).

Summary RMS data is stored for macrotexture at operator selected intervals. Additionally, raw texture "bursts" can also be stored.

Correlation studies have produced an R2 of 96% correlation with ASTM standard tests such as the sand patch method for texture measurement.



Features

- Full bandwidth macrotexture
- Multiple lasers (optional)
- Data collection at variable traffic speeds
- Referenced to precise chainage or Global Positioning System (GPS) Coordinates
- Can be installed on any vehicle
- Mean profile depth measurement is ISO #13473-1 compliant