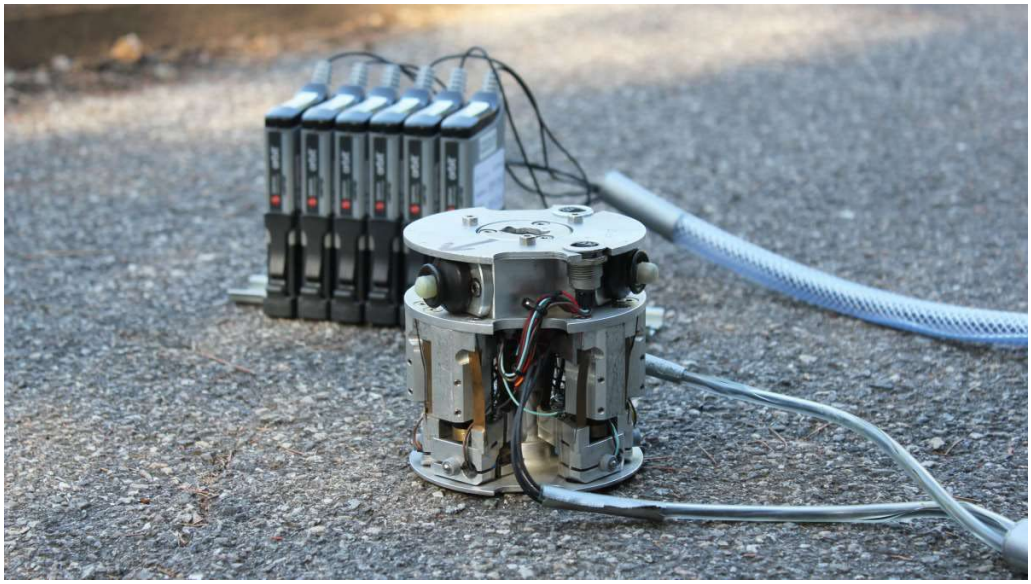
Gauging Probes

Application Story

Measure layers of pavement deformation



The Challenge

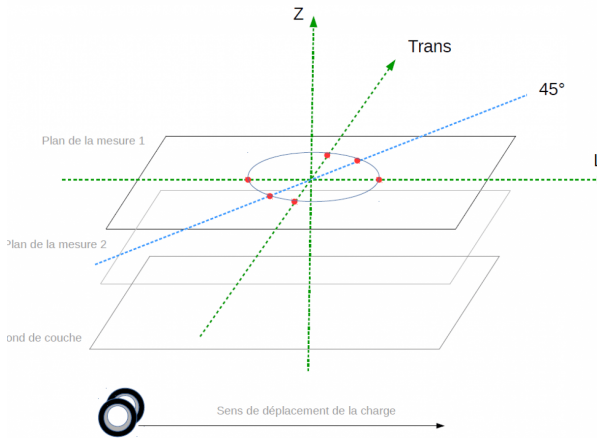
The French Laboratory Cerema (www.cerema.fr) was looking to build an **"Ovalization"** probe, which is inserted into roads and monitors the horizontal deformations of different layers of pavement. For this, you need a sensor that is compact, rugged, and can easily output data to a software package.

The Solution

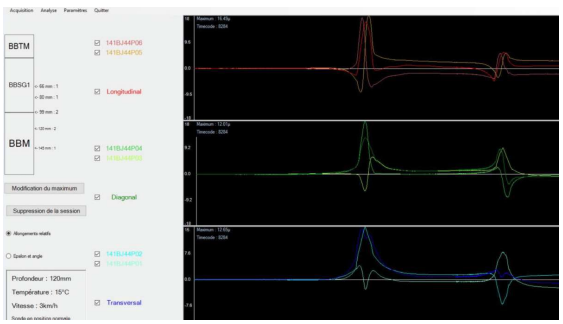
Cerema chose to use (6) Solartron sensors for their Ovalization probe. They also utilized the Orbit Network, to easily connect all six sensor and output to a data acquisition software. Advantages include:

- **High Resolution:** Solartron transducers have resolution up to 0.01 microns, measuring the slightest shift in materials in a rugged, long lasting package.
- **Compact package**: Cerena needed to make an easily portable probe, and Solartron sensors fit their needs.
- **Quick Outputs:** Testing is carried out at different speeds, which means quick,accurate measurements is paramount. Orbit allows up to 3906 readings, per probe, per second.

More information about the Ovalization Probe can be found here.
https://www.cerema.fr/fr/actualites/modernisation-chaine-acquisition-sonde-ovalisation



A diagram of the measurements that the Ovalization probe takes



The software being developed displays immediate feedback

Orbit® – The Total Measurement System from Solartron Metrology

The Solartron Orbit® Digital Measuring System provides a limitless set of measurement solutions, with numerous different interfaces to computers and PLC's.

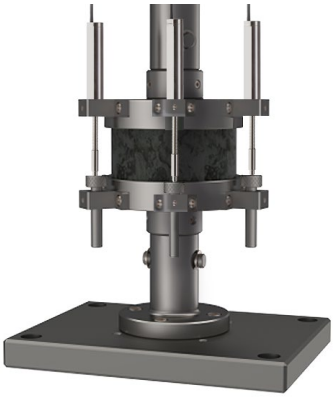
S-Series

Special probes for low temperatures

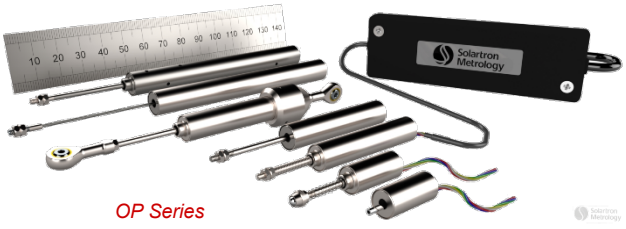
Vented Transducer

Compact displacement

S-series transducer monitoring a crack



Measurement of concrete compression



OP Series