



Fully certified by VCA

Two Horiba OBS-ONE systems with PN

Full data analysis service



Pitot flow tube

MAHLE Powertrain has recently expanded its extensive vehicle emissions testing capability at its Northampton, UK headquarters to include Portable Emissions Measurement System (PEMS) testing.

This new service further enhances the vehicle testing services which are available and allows the precise measurement of tailpipe emissions whilst the vehicle is being driven on road.

This testing forms part of the new RDE (real driving emissions) gaseous and particulate number (PN) legislation requirements for EU type approval which is coming into force in September 2017, with the monitoring phase already underway. It will also provide a more accurate measurement of fuel consumption / CO2 emissions during 'real world' driving conditions. MAHLE Powertrain was the first ISP to be certified by the VCA to perform legislative RDE emissions testing. Enabling full service from development to certification.



## MAHLE Portable Emissions Measurement System

The new PEMS equipment is fully self-contained and includes a vibration proof exhaust gas analyser unit, a flow meter amplifier, a range of pitot tubes (for measuring exhaust flow), sensors for temperature / atmospheric pressure / humidity, a GPS unit, a dedicated laptop PC and a NiMH battery pack. The analyser has two input channels to allow use in vehicles with twin exhaust outlets.

The complete system is designed to be mounted inside the vehicle with the tailpipe gas being delivered through a 2m sampling line. Accurate measurements of CO, CO2, NO, NOx and PN are taken during the drive, as well as mass emissions, air-fuel ratio and exhaust gas temperature. Video capture is also included within the system as a recently added legislative requirement for RDE testing with PEMS.

Our new PEMS testing capability complies with all the latest documented EU requirements and, with the ability to provide related support for the in-depth analysis of the resulting data, MAHLE Powertrain is clearly demonstrating its commitment to meeting our customer's vehicle development requirements now and well into the future.







