

## **MAHLE** Powertrain **Portable Emissions** Measurement System (PEMS)

Powertrain

Fully certified by VCA Two Horiba OBS-ONE systems with PN Full data analysis service



>> Pitot flow tube

### Portable Emissions Measurement System

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 Powertrain Ltd Costin House St James Mill Road Northampton NN5 5TZ

Tel: +44 (0)1604 738 000

MAHLE Powertrain LLC 14900 Galleon Court Plymouth Michigan 48170 Tel: 001 734 738-52 01

MAHLE Powertrain GmbH Wamslerstrasse 5 81829 Munich Germany Tel: +49 89 96 29 15-0

www.mahle-powertrain.com

# MAHLE Powertrain Portable Emissions Measurement System (PEMS)

### **Benefits**

- PEMS equipment fully self-contained
  - > Vibration proof exhaust gas analyser unit
  - , Flow meter amplifier
  - > Range of pitot tubes (for measuring exhaust flow)
  - Sensors for temperature, atmospheric pressure & humidity
  - , GPS unit
  - Dedicated laptop PC
  - NiMH battery pack
- Analyser with two input channels to allow use in vehicles with twin exhaust outlets



### Capabilities

- Designed to be mounted inside vehicle with tailpipe gas being delivered through a 2m sampling line
- Accurate driving measurements of:
  - , CO, CO2, NO, NOx and PN
  - Mass emissions
  - > Air-fuel ratio
  - > Exhaust gas temperature
- Video capture included within system as recently added legislative requirement for RDE testing with PEMS





### Summary

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.

MAHLE ZG Transmissions Georg-Kollmannsberger-Str. 3 85386 Eching Germany Tel. +49 89 18 94 169-0 MAHLE Automotive Technologies
No. 1299 Huan Cheng Bei Road
Fengpu Industrial Park 201 401
Shanghai, Fengxian District
China
Tel. +86 21 5136-0595