

Non-Road Machinery Real-world emissions testing

2023

Our Belief

When it comes to the pursuit of emissions reduction, we believe in the power of clarity, transparency and integrity. With real-world data we can meet emissions challenges – instilling trust and confidence in our industry partners and public.

It's with our commitment and independence we are able to make a significant contribution toward positive change and to achieve enduring results.

Who we are

- Specialist in independent, real-world, on-road emissions testing
- Work with everyone, but captured by no-one
- Headquartered in the UK, but test globally via Germany, US and South Korea
- From regulated tailpipe, to broad spectrum of unregulated pollutants
- Over 2,500 vehicles/machines tested across passenger cars, commercial vehicles and off-road machines
- Largest commercially available database of real-world emissions data
- Leading standardisation of new methods through CEN

Services

- Project management – for example, liaising with the end user to arrange the tests and ensure customer satisfaction is maintained
- Mobility – we work across Europe via bases in the UK and Germany (US and South Korea)
- Flexibility – we work around your operators' working hours. For example, arrive onsite at 5am to warm the PEMS up before work/ testing begins at 7am
- Experience – we have experience across various applications, including various agricultural
- Expertise – we know whilst we are onsite, **during the test**, whether we have a successful Stage V ISM test. Typically, we need between 2-3 x two-hour tests to accumulate sufficient test data

Regulatory and certification testing

- Euro 6 ISC evaluation
- Euro VI/VII ISC and certification
- Stage V ISM
- Retrofit accreditation
- PEMS (portable emissions measurement systems) from Sensors and HORIBA. European Commission and EPA approved
- CO, CO₂, NO, NO₂, NO_x, N₂O, CH₄, NH₃, NMHC, THC, PN & PM



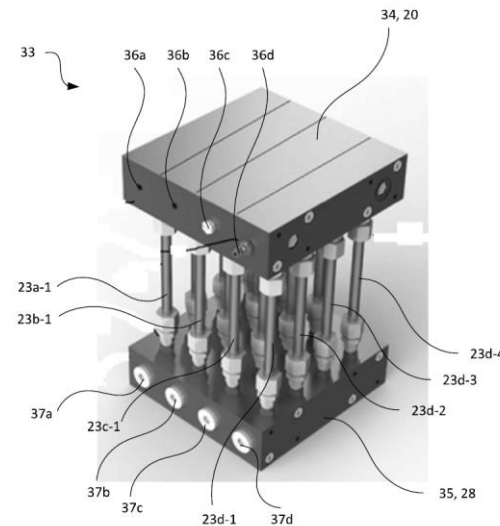
A yellow wheel loader is shown in a quarry setting, moving material. The background features large piles of gravel and a clear blue sky. A semi-transparent purple banner is overlaid on the right side of the image, containing white text.

Beyond regulated pollutants

ASSURED | INDEPENDENT | RESPONSIVE

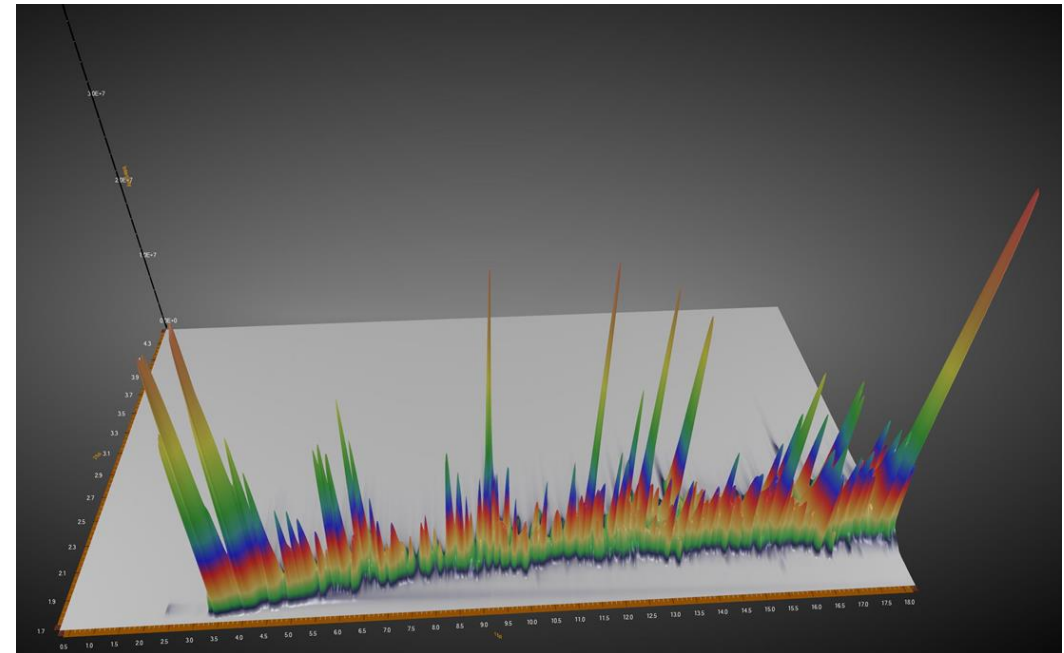
PEMS + Gas chromatography (GC)

- Patent pending innovation combining PEMS with two-dimensional GC
- Exhaust sampled via PEMS to a series of sample tubes
- Geofencing enables exhaust samples to be targeted
- Real-world samples analysed using advanced gas chromatography



2DGC - advanced emissions analysis

- TD-GCxGC-TOF-MS from Markes International
- Volatile and semi-volatile organic compounds C₂ to C₄₄
- Formaldehyde CH₂O
- Nitrous oxide N₂O
- Polycyclic aromatic hydrocarbons



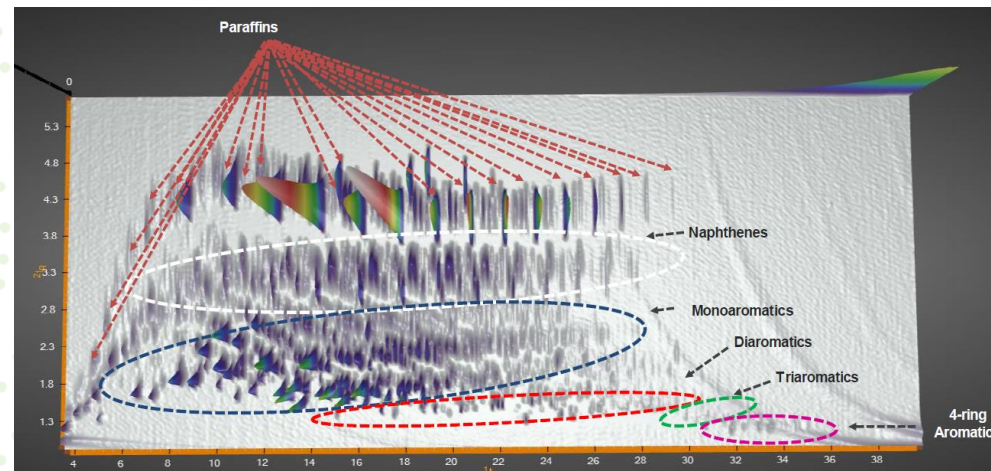


Fuels analysis

ASSURED | INDEPENDENT | RESPONSIVE

Fuels, lubricants, additives analysis

- Real-world efficiency and tailpipe emissions testing using PEMS
- Unregulated emissions measurement, including VOC speciation
- Chemical product analysis using gas chromatography/mass spectrometry
- Excellent compound separation using two dimensional GCxGC
- Compound identification and quantitation using multiple detectors



ASSURED | INDEPENDENT | RESPONSIVE

Assured

Emissions testing in real-world conditions brings challenges that experience anticipates and expertise overcomes. We deliver.

Independent

Objectivity and candour are the driving forces in all our work, so you know the facts.

Responsive

We're fast on our feet so we can conduct emissions testing when and where we're needed.

Thank you.

Contact Us

info@emissionsanalytics.com

UK: +44 (0)20 7193 0489

US: +1 424 257 0257

ASSURED | INDEPENDENT | RESPONSIVE