

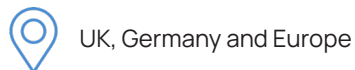
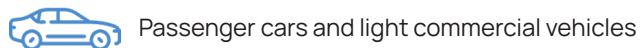
A comprehensive EMC testing service

Case study overview

A major global automotive OEM appointed HORIBA MIRA to handle the entirety of its electromagnetic compatibility (EMC) testing for the UK and Europe. This partnership enabled the OEM to operate without the significant costs associated with running a large-scale EMC test facility.

Furthermore, HORIBA MIRA provided a complete service, which included preparing test vehicles and liaising with suppliers. This, combined with the team's wealth of experience in EMC engineering, helped to eliminate risk with HORIBA MIRA overseeing the entire process from component verification through to full vehicle type approval.

Engineering team deployed: Five engineers plus a team leader embedded within the client organisation in the UK and Europe, supported by up to 20 additional engineers at HORIBA MIRA's headquarters in the UK.



The wraparound service that we provide takes a lot of risk out for the manufacturer. If a test vehicle encounters an issue, for instance, our technicians will diagnose, communicate and resolve where possible to ensure project timelines stay on track.

**Robert Cartwright, Global Cybersecurity and EMR
Solution Leader**

HORIBA MIRA



Approach

The test programme was coordinated by HORIBA MIRA engineers embedded within the client's organisation. As an integrated part of the development team, they have a deep understanding of each project's specific timeline and requirements.

This allowed them to tailor the test plan extremely efficiently. Likewise, working side by side with the OEM engineers ensured that the HORIBA MIRA team was aware of any specific challenges imposed by the new parts or new technologies on the vehicle.

This meant that they could identify upcoming test requirements and develop or adapt the test methodologies to support these well in advance. Test activities typically began with component and systems level evaluations and progressed through whole-vehicle prototype stages before reaching sign-off. As part of the support HORIBA MIRA handled all wraparound services, such as vehicle preparation and fault finding, allowing the OEM to take a hands-off approach.

Successes and benefits

HORIBA MIRA handled the entirety of the client's EMC testing across a broad range of vehicle platforms and powertrain types. Key points included:

- ✓ **Integrating into OEM teams** to ensure cascade of control to its suppliers, agreeing evaluation plans, monitoring requirements and evaluation criteria
- ✓ Liaising with suppliers to **identify potential EMC issues** and flagging any concerns through detailed evaluation of supplier provided reports
- ✓ **Engineers embedded** within the client OEM ensures that the vehicle evaluation plan takes into account the latest developments in the programme and responds as efficiently as possible to ensure fast turnaround
- ✓ **Flexible access** to HORIBA MIRA's world class suite of EMC testing facilities
- ✓ **Full range of wraparound services** to ensure that the testing progresses smoothly and efficiently

Deliverables

- ✓ Managed turnkey service provided to OEM
- ✓ Agility to match programme service requirements
- ✓ Reduces OEM internal investment and upskilling
- ✓ Full team integration conserves OEM internal resource
- ✓ Fast turnaround of Valuable Prototype hardware
- ✓ Engineering lead decision making based upon risk management
- ✓ Priority access to high demand facilities