

XiL testing to support the introduction of a new powertrain platform

Case study overview

HORIBA MIRA was brought in to support the integration of a new powertrain on Tevva's 7.5-tonne battery electric trucks.

Having previously carried out cell characterisation to assist with Tevva's choice of battery pack for the new powertrain, a team of consultants from HORIBA MIRA developed an x-in-the-loop (XiL) simulation environment (both

physical and virtual) that was used to fast-track and de-risk the integration of the new systems.

A key focus was the use of hardware, software and model in the loop development - hence the 'X' in XiL - to de-risk the interface between the vehicle VCU and a newly developed BMS system utilising HORIBA MIRA optimisation algorithms.

Engineering team deployed: Five UK-based subject matter experts formed the core of a team that numbered up to ten at times.

