



INDUSTRY SPOTLIGHT: ADAPTING TEST PROCEDURES FOR ELECTRIC VEHICLES

As technological progress in the electrification of buses and trucks advances, sales of - and operational scope for - electric vehicles are expanding significantly.

The high voltage test parameters for EV are more demanding than those traditionally used in automotive manufacture; MK Test Systems' expertise is supporting this rapidly growing new industry.

SUPERCHARGE YOUR EV TESTING

Historically automotive companies have used a red light / green light test approach which means no measurements are taken and only a pass / fail criteria are considered. This approach is not sufficient when building very high voltage EV vehicles and that's why MK is uniquely positioned.

Our pedigree is in the aerospace sector, where everything is recorded, and individual pass and fail criteria are set as a measurable result. This background combined with our user-friendly software make an MK Test System a smart choice for EV manufacturers investing in new test technology.



INDUSTRY:

Manufacturers of electric vehicles; trucks, trains, buses, aircraft ground support vehicles

REQUIREMENT:

High voltage, long dwell time, dielectric strength, harness testing. Traceability of results, data analysis.

SOLUTION:

Automeg – automatic high voltage wire harness test system, function test system.



CASE STUDY

MK Test Systems was approached by a world-leading manufacturer of trucks and buses in order to equip them with suitable end of line test equipment for a new generation of EV trucks. The test parameters were demanding - 10,000VDC at 10GOhm. Our work in the oil & gas industry (which requires even higher voltages and long dwell time), meant that our systems are capable of testing power cables and interconnects at levels way beyond this.

Dielectric strength tests demanded 6700VDC for wire harnesses and 3100VDC for other systems. MKAT – our proprietary gen3 software – allows the customer to interface with the test programs using the API and upload results for each vehicle directly to their SAP system.

Test reports offer a complete breakdown of individual results in XML format, which allows not only traceability, but also enables in-field issues to be analysed against the original test data.



Our automatic test systems are helping global automotive OEMs and other Electric Vehicle manufacturers navigate the increased demands of high voltage testing.

This *industry spotlight* document provides an overview of typical results – for further information and details about our range of systems, please visit our website www.mktest.com or get in touch with us.



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MK Test Systems, ATE House, Westpark 26, Chelston, Wellington, TA21 9AD, United Kingdom

T +44 (0)1823 661 100 E info@mktest.com W www.mktest.com

Registered in England and Wales. Company No. 02706775. VAT Registration No. GB927126623.

Registered office address: ATE House, Westpark 26, Chelston, Wellington, TA21 9AD, United Kingdom