

Requisition Number:

Job Description.

HORIBA MIRA is a global provider of pioneering engineering, research and test services to the automotive, defence, aerospace and rail sectors. We work in close collaboration with vehicle manufacturers and suppliers around the world, providing comprehensive support ranging from individual product tests to turnkey engineering design, development and build programmes.

With over 70 years' experience in developing some of the world's most iconic vehicles, our engineers utilise the latest test facilities and simulation tools to make vehicles and journeys safer, cleaner, more efficient and rewarding. Our suite of 37 major test facilities, 100km of specialised proving ground and wealth of engineering experience, combined with our expanding international presence, means we are confident that we can achieve our vision – that by 2020 every journey in the world will be positively influenced by us.

Progress towards achieving our vision has been significantly accelerated through the creation of MIRA Technology Park, Europe's largest transport technology R&D cluster. By applying our advanced engineering, test and validation capabilities to our customers' challenging programmes, we are already shaping journeys of the future

Title of Job:	ABDS test engineer			
Department	D456 – Electrification & Battery Testing			
Grade:	Up to 4			
Date Required:	ASAP			
Salary Range:				
Number Required:	1			
Location:	HORIBA MIRA Nuneaton			
Contract Type:	Permanent:	Х	Contractor:	
Responsible To:	Facilities Operations Leader, Electrification & Battery Testing			
Subordinates:	None			



Main Purpose of Job

HORIBA MIRA – a world-leader in advanced engineering, research and product testing has a dedicated Advanced Battery Development Suite (ABDS), a £2m investment by the HORIBA Group into HORIBA MIRA's engineering capabilities. The ABDS provides test and development services for battery packs and other components for hybrid and electric vehicles.

The facility enables HORIBA MIRA to complete cell, module and battery pack testing, simulated battery pack testing, integration testing and development of powertrain and battery packs at system level including EMC characterisation.

The main responsibilities of the role are: -

- Develop test scripts and set up and operate ABDS equipment to deliver customer and engineering test and development programmes for batteries, modules, and cells.
- Provide technical support and input to commercial proposals, validating technical content, cost, risks, and facility capabilities.
- Collaborate with MIRA Engineering teams to guide R & D activities and to further develop integrated battery test and engineering services for MIRA's extensive customer base.

Key Functions

- Delivering customer projects through ABDS, managing project timescales, cost, and quality, and providing clear communications with the customer.
- Designing, programming, and running test scripts for Test Automation System.
- Instrumentation of units in preparation for test (thermal and electrical instrumentation).
- Performing tests using the suite of ABDS equipment (pack cycler, thermal chamber, thermal management, test automation software).
- Post-processing test data utilising tools such as MATLAB/Simulink, dSPACE Control Desk, CANalyzer and PCAN explorer.
- Test support of HiL testing on a dSPACE SCALEXIO.
- Producing technical reports and test summaries for internal and external customers.
- Providing technical input to proposals for ABDS and battery abuse test prospects.
- Providing technical support to the wider electromobility and propulsion team as required.

Essential Qualifications	Preferred Qualifications
 Relevant engineering degree with a minimum of 2:1 (e.g. Electrical / Electronic Engineering or related) 	First Aid trainedFire Marshall trainedHV Safety trained

Essential Experience	Preferred Experience		
 Electrical test technician/engineer or development engineer ideally with a minimum of 3 years' experience across the following areas: Electrical and electronic developmental testing of automotive systems / Battery systems. Working knowledge of Li-ion battery systems Working knowledge of CAN systems and associated analysis tools such as Vector CANalyzer. Programming and scripting of control 	 Production of documentation for local HS&E control Working knowledge of MATLAB toolsets for post-processing and report generation. Working knowledge of test automation systems such as Kratzer PAtools, Bitrode or similar. 		



systems and exposure to MATLAB.

 Working knowledge of a wide array of test equipment and instrumentation such as DMMs, signal generators, oscilloscopes etc.

What is the candidate likely to be doing now?

• Working as an engineer or senior technician in an electrically related test delivery area or an electrically biased development engineer.

Other information

- Must have excellent communication skills, both written and verbal, able to convey deeply technical content to team members with differing technical abilities.
- Must have an aptitude for scripting & programming with a solid understanding of control flow.
- Be capable of delivering a high standard of technical writing.
- Have well-developed analytical skills rigorous but pragmatic.
- Have good interpersonal skills a consensus-builder not confrontational.
- Must be a self-starter and able to execute designated tasks accurately and within timing and budgetary constraints.
- Ability to work on shifts (although this is likely to be minimal).
- Security clearance will be required.
- Full UK driving licence.