

Requisition Number: 23109

Job Description.

HORIBA MIRA is a global provider of automotive engineering, research and test services, with 75 years of experience in developing some of the world's most iconic vehicles.

Working in collaboration with vehicle manufacturers and suppliers around the world, we provide comprehensive support ranging from technology development and individual product tests through to full-vehicle design, development and build programmes.

Whilst traditionally known for our vehicle test services – including over 40 major facilities and 100km of Proving Ground – HORIBA MIRA is so much more than this. Over the last ten years, we have invested heavily in the evolution of our engineering capability and in the development of MIRA Technology Park, Europe's leading mobility R&D location for developing the latest automotive technology.

The unique combination of engineering expertise, advanced testing facilities and prime location of MIRA Technology Park in the heart of the UK automotive industry, enables customers to develop and validate their technology, or vehicle, in one place.

The Electromobility Systems department in the Propulsion & Electromobility group delivers a range of advanced solutions for the development of energy efficient electrified vehicles. In particular, the full Vehicle Thermal Management system is critical for the effective development of electric and hybrid vehicles. This role will enhance the Propulsion & Electromobility capability group across both Engineering & Technology and Test Services divisions.

Title of Job:	Automotive HVAC System Engineer			
Department:	445 – Electromobility Systems			
Grade:	4P			
Date Required:	ASAP			
Salary Range:	£29,600 to £47,500 pa based on skills and experience			
Number Required:	1			
Location:	Nuneaton, UK			
Contract Type:	Permanent:	Yes	Contractor:	No
Responsible To:	Manager – Electromobility Systems			
Subordinates:	None			

Main Purpose of Job
<ul style="list-style-type: none"> To Plan, conduct and execute a suite of bench tests and/or vehicle climatic tests for the development and optimisation of automotive Heating, Ventilating and Air Conditioning systems and powertrain thermal management systems To identify and develop solutions for the performance improvement and efficiency optimisation of thermal systems for hybrid and electric vehicle applications To support model-based design activities for vehicle thermal management systems with associated control strategies

Key Functions

Engineering Functions:

- Contributing to a multi-disciplinary team to support the delivery of complex projects using a V-cycle engineering approach and following a gated engineering development process where appropriate
- Contributing and supporting test work planning
- Overseeing and co-ordinating all test preparatory activities encompassing the instrumentation of automotive air conditioning and heat pump systems in MIRA's facilities at component, sub-system and system level
- Running the Thermal Systems Test Bench as per the test requirements agreed with customers
- Recording, post-processing and presenting results in the adequate format i.e. graphical format
- Analysing the data and supporting the provision of recommendations for the
- Preparing technical reports outlining results in system performance and efficiency optimisation
- Working to strict timescales and budget constraints including close interaction with customer
- 1D modelling of HVAC systems, powertrain cooling systems and battery thermal management systems using GT-Suite while ensuring their correlation where applicable
- Supporting and conducting vehicle climatic tests, especially for Thermal Energy Management benchmarking

Other Functions:

- Seeking to maximise productivity
- Adhering to teams' best practices and compliance to standard local procedures
- Conforming to QHSE standards
- Delivering project activities within time, budget and quality
- Contributing and supporting the development and implementation of Continuous Improvement plans
- Supporting the delivery of R&D plans, focusing on capability development, product offerings and IP generation

Essential Qualifications	Preferred Qualifications
<ul style="list-style-type: none"> • Good first degree in an appropriate Subject, most probably Mechanical Engineering, Thermal Engineering, Electro-mechanical Engineering. Significant relevant professional experience will be taken into consideration 	<ul style="list-style-type: none"> • Higher degree post-graduate qualification in a related engineering discipline (relevant MSc or Meng, PhD) • Chartered Engineer and membership of an appropriate institution.

Essential Experience	Preferred Experience
<ul style="list-style-type: none"> • Good understanding of the physics involved refrigerant systems i.e. Mobile Air Conditioning system, automotive heat pump systems • Solid report writing skills • Strong thermodynamics background 	<ul style="list-style-type: none"> • Experience with 1D modelling • Knowledge of cooling systems • Systems Engineering principles and V-cycle approach • General knowledge of automotive engineering

<ul style="list-style-type: none"> • Experience in Thermofluids testing and instrumentation • Good use of Ms Excel 	<ul style="list-style-type: none"> • Technical knowledge of powertrain electrification • xEV energy management • Experience in vehicle climatic testing • Matlab/Simulink control modelling • Climate control and software development • Knowledge in cabin thermal comfort
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What is the candidate likely to be doing now?
<ul style="list-style-type: none"> • Undertaking a similar test and development role in an OEM, Tier-one supplier or automotive consultancy. A similar role within the building, rail or aerospace industry could be considered.

Other information
<p>The candidate should:</p> <ul style="list-style-type: none"> • Have excellent communication skills, both written and verbal, able to convey technical content to team members with differing technical ability • Excellent communication and interpersonal skills - ability to communicate appropriately at all levels and recognise the values of all team members, regardless of level • Be a self-starter and able to execute designated tasks accurately and within timing and budget constraints • Have well-developed analytical skills – rigorous but pragmatic • An approachable and motivational character • The ability to contribute positively to a team working environment • A positive, can-do attitude with an ability to work well under pressure • Be willing to travel in the UK and overseas for short term visit • Be prepared to work flexibly • Have a full UK driving license