

Job Title: Automated Testing Engineer	Location: Hunmanby, UK Mansfield, UK
Department: Engineering, Test and Approvals	Contract: Permanent
Reports To: The Test & Approvals Department Manager	Direct Reports: N/A

1.0 Job Summary & Role

The Automated Testing Engineer will work within the Engineering department located at DSE headquarters in Hunmanby, North Yorkshire or at our development office in Mansfield, Nottingham.

They will develop automated testing platforms used for functional testing needed for the verification and validation activities at a product and system level on new and existing product developments, ensuring high-quality products are built by the company.

2.0 Key Responsibilities & Main Duties

- Develop and maintain HIL / SIL systems for new features and regression testing.
- Develop and maintain internal applications, procedures and techniques for verification and validation testing using automated testing.
- Write and execute CodeSYS applications and plans for the testing of the Off-Highway products as part of new product development and release process.
- Utilise existing and contribute to the development new testing tools.
- Communicate and maintain timing records for time spent on projects.
- Make use of the company documentation, version control system and issue management systems to record findings in a controller manner.
- Obtain product knowledge and assist with new product specification.
- Other ad hoc duties as and when required.



3.0 Internal & External Relationships

Engineering department – the engineer will work closely with the software development team to develop automated testing in line with the newly added features

Engineering management – the engineer will be an authority on automated testing development and provide engineering management with guidance on new product and feature integration with the automated testing

Technical Support – liaise with Technical Support for porting customer field applications into automated testing applications

4.0 Key Performance Indicators

- Excellent embedded and PC software application development knowledge for automated test development.
- Attention to detail, patience and self-discipline required for software testing.
- Consistently using positive working and communication practices to contribute to software quality, verification and validation.

5.0 Essential/Desirable Factors

Knowledge	
<p>Essential:</p> <ul style="list-style-type: none"> • High level of application development knowledge for automated testing • A good level of understanding of final applications, testing methodologies and software product development lifecycles • Good knowledge of the C++ programming language or equivalent 	<p>Desirable:</p> <ul style="list-style-type: none"> • Qt GUI development tool • A solid level of CodeSYS applications development
Skills & Attributes	
<p>Essential:</p> <ul style="list-style-type: none"> • Good understanding of the CAN communication protocol and J1939 standard • Prolific with standard engineering test and measurement tools like: 	<p>Desirable:</p> <ul style="list-style-type: none"> • PLC programming in structured text • OpenCAN protocol • ModBus over TCP/IP • Operation of the ECU controlled engines



JOB DESCRIPTION & PERSON SPECIFICATION



<p>multimeter, current and voltage generators, frequency generators, oscilloscopes, CAN Simulators.</p> <ul style="list-style-type: none"> • Attention to detail, patience and self-discipline • An open attitude for learning and continuous skills development • Able to perform tasks on its own or as part of a team. Teamwork is essential • Good understating and usage of the Microsoft Office package 	
Experience	
<p>Essential:</p> <ul style="list-style-type: none"> • Experience in development and running of HIL systems 	<p>Desirable:</p> <ul style="list-style-type: none"> • Application development experience for the automotive or off-highway sectors • Proven experience in a software development environment and/or a automated testing role • Experience in development and running of HIL systems • Proven experience in application development using the CodeSYS platform or similar
Qualifications	
<p>Essential:</p> <ul style="list-style-type: none"> • Bachelor's degree level qualification or equivalent in electronic engineering, automation engineering or related field 	<p>Desirable:</p> <ul style="list-style-type: none"> • ISTQB Test Automation Engineering Certification

Created by	Dated Created
T & A Department Manager	24/10/2023

