

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

1.0 Job Summary & Role

DSE is a world leading manufacturer for generator controllers, auto transfer switches, and off-highway application controllers with a continuous history of growth and expansion for more than 40 years.

The Senior Automation Test engineer will work within the Test and Approvals department and be located at either the DSE headquarters in Hunmanby, North Yorkshire or at our development office in Mansfield, Nottingham. They will take the lead in the development of if test automated systems for function and unit testing for the verification of new and existing product.

The role will involve global collaboration with the wider business groups teams located in US and Germany. The successful candidate will provide guidance and influence engineers for the best practices on test automation as part of the drive towards functional safety approval and improved cyber security.

2.0 Key Responsibilities & Main Duties

- Work on the technical strategy and direction, as well as the execution, for the introduction and expansion of automated testing, CI and CD tools and technique.
- Present to senior management and provide guidance on direction for automated testing.
- Be a key contributor to company achieving compliance to functional safety cybersecurity and standards.
- Lead the ongoing development and maintenance of test systems, potentially using LabView
- Work with software engineering leads to improve the testability of code written for embedded systems.
- Work with the hardware design team to ensure that the electronic assemblies have the sufficient features to facilitate automated test.
- Develop and maintain internal applications, procedures and techniques for verification and validation testing.
- Provide mentorship and contribute to the development of other engineers.
- Maintain personal timing records for projects spend.
- Contribute to and use company quality systems and tools.
- 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 whilst developing the testing facilities and controlling software. Communicate the results in a professional manner to the stakeholders.

Engineering management – the engineer will be an authority on HIL / SIL testing development and will advise the engineering management team on product design to facilitate HIL / SIL testing for existing and future features.

4.0 Key Performance Indicators

- Excellent LabView applications development and experience using NI hardware
- 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

Experience	
Essential: <ul style="list-style-type: none"> • Held a lead role in the area of test automation in the development of embedded software • Experience with Hardware or Software in loop systems, potentially using the National instruments LabView tool chain. • Demonstrable experience of functional safety approvals. • Experience in an embedded software development role. 	Desirable: <ul style="list-style-type: none"> • Automated testing development on industrial control solutions • Experience in the power generation industry.
Knowledge	
Essential: <ul style="list-style-type: none"> • Solid understanding for software development for industrial electronic applications. • Good knowledge of the C/C++ programming language 	Desirable: <ul style="list-style-type: none"> • Electrical distribution systems • PLC programming • CAN protocol (CANOpen/J1939) • ECU controlled engines
Skills & Attributes	
Essential: <ul style="list-style-type: none"> • Proficient with standard engineering test and measurement tools e.g: multi-meters, current and voltage generators, frequency generators, oscilloscopes, network simulation tools. • Leadership skills and the ability to influence change 	Desirable:
Qualifications	
Essential: <ul style="list-style-type: none"> • Engineering degree level qualification or equivalent in electronic engineering, automation engineering or related field 	Desirable: <ul style="list-style-type: none"> • LabVIEW Certification (CLAD/CLD)



JOB DESCRIPTION & PERSON SPECIFICATION



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