

## ROLE PROFILE SUMMARY

<b>Role:</b>	Electrical Design Engineer
<b>Reporting to:</b>	Hardware Department - Technical Manager
<b>Reports within region:</b>	Connected Energy Technical Centre, Unit 54 Hethel Engineering Centre, Chapman Way, Hethel, Norfolk NR14 8FB

<b>Purpose of Role:</b>	Work as part of a world leading multidisciplinary product development team in a rapidly growing business to undertake electrical design work in relation to electrical energy storage systems. The energy storage systems in question are unique in that they utilise 2 <sup>nd</sup> life electric vehicle batteries as their storage medium.
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### ACCOUNTABILITIES

**Listed:**

1. Undertaking of electrical design work that meets the standards dictated by relevant regulations and standards.
2. Working as part of a team and working with the team to deliver solutions that meet with the wider requirements of the business.
3. Planning and delivering projects efficiently and effectively to meet with agreed timings
4. Maintaining a working knowledge of the businesses products and of relevant developments in the industry
5. Maintaining good, professional and safe working practices within the business.
6. Complying with company policies

### **Role**

As an Electrical Design Engineer, you will work as part of a multi-disciplined group. Our electrical engineers are involved in projects from the concept and detail of the design, through to development, implementation, testing and handover. You may also be involved in supporting maintenance programmes as well as system commissioning.

### **Responsibilities**

While the work will vary according to the project, you'll typically need to:

- Understand product/project requirements
- Design build and test models and prototypes of new products during the R&D stage
- Produce product documentation for internal and external use as well as technical reports
- Work to British (BS), European (EN), American (UL) and other standards and ensure its proper implementation
- Coordinate with other departments involved in the project, specially the software team
- Deal with suppliers during design and carry out component selection activities
- Provide technical expertise and support during manufacturing (FAT), design validation (DVP), installation (SAT) and maintenance of units

## Specific Skills Requirements:

You'll need to show:

- To have a practical design knowledge on (at least one) of these fields: LV system, electrical machines, control panels, distribution panels. Ideally with hands on experience during your career
- Capability to draw up electrical schematics, layouts, cable schedule documents and single line diagrams using appropriate CAD packages (AutoCAD Electrical or similar) and using industry standard symbols
- The ability to interpret a design brief and converse with electrical component suppliers regarding component selection and specification
- Power systems technical knowledge: Transformers, Protection Studies, Earthing arrangements, Fault Current Calculations, Harmonics Calculation, power Factor Considerations and Cabling.
- A working knowledge of DIN rail mounted components such as isolators, protection devices, switching devices, power supplies, cable distribution, etc
- Competence in LV design in systems with 240VAC, 400VAC 3 Phase and up to 1000VDC
- Ability to carry out assembly, testing and validation on R&D prototypes
- Self-motivation and capability of delivering work tasks without a high dependency of additional resource.
- Demonstrate the ability to have good verbal and written interaction with existing design team members and suppliers

Complementary skills:

- Experience in design for manufacture
- An analytical and problem-solving approach to work
- The ability to read and produce design specifications and technical drawings
- The ability to work in a multidisciplinary team commitment to continuing professional development throughout your career.
- An ability to multitask

Potential complimentary career backgrounds:

- Electrical engineering industry, particularly design and manufacturing
- Power distribution design
- Oil and gas Electrical design related roles
- Electrical Machine design
- Electrical control panel design and manufacture
- Renewable energy installation, integration, planning and testing
- Electrical Commissioning and Service engineer
- Telecommunications engineering
- Electronics design engineering

**SKILLS, EXPERIENCE AND QUALIFICATIONS REQUIRED FOR JOB ROLE**

	<b>Essential</b>	<b>Desirable</b>
<b>Skills</b> <i>e.g.</i> Computer literacy Project Management Interpersonal	<ul style="list-style-type: none"> <li>▪ Excellent planning and organising skills</li> <li>▪ IT Literate (MS Word, Excel, etc)</li> <li>▪ Numerate</li> <li>▪ The ability to make decisions</li> <li>▪ Self-starter and driven</li> <li>▪ Ability to work independently</li> <li>▪ Good verbal and written communication skills</li> </ul>	<ul style="list-style-type: none"> <li>▪ Presentation skills</li> <li>▪ Excellent communication skills</li> <li>▪ Relevant technical and up-to-date sector knowledge</li> </ul>
<b>Job Related Experience</b> <i>e.g.</i> Number of years' experience required to do the role. Does the experience need to be industry specific	<ul style="list-style-type: none"> <li>▪ 2+ years working within a relevant electrical engineering role (minimum)</li> <li>▪ Advanced use of CAD (2D)</li> <li>▪ Presentable evidence relating to the design, test, validation and commissioning of LV electrical systems</li> <li>▪ Ability to carry out testing on R &amp; D prototypes</li> <li>▪ Experience in Fault-finding</li> </ul>	<ul style="list-style-type: none"> <li>• Renewable energy experience</li> <li>• Knowledge on relevant BS, EN and/or UL standards</li> <li>• Power distribution knowledge (up to 11kV or higher)</li> <li>• Experience related to DNO/TSO</li> <li>• Civil works related experience</li> </ul>
<b>Industry Qualifications</b> <i>e.g.</i> Professional Vocational, i.e. City and Guilds Educational (where appropriate)	<ul style="list-style-type: none"> <li>▪ HNC/HND Electrical/electronic engineering</li> <li>▪ Knowledge of IET Wiring Regulations 18<sup>th</sup> Edition (or previous)</li> </ul>	<ul style="list-style-type: none"> <li>• IET Wiring Regulations 18<sup>th</sup> Edition certified</li> <li>• Bachelor's Degree in Electrical Engineering or the equivalent from a related accreditation board</li> </ul>

**Additional Information**

*Immediate* eligibility to work on the UK/EU

Driving License	Yes (capable and willing to drive a car)
Mobility	Needs to be able to travel in line with role requirements and spend nights away from home when required. Internationally but mostly Europe. 10% travel max.

Please send your CV and Covering letter to the email address below stating which Vacancy you are applying for.

FAO: Arek Porebski/Eduard Sanz

Unfortunately, due to the volume of applications we receive, we are not always able to contact everyone, however if you are invited for an interview, you will be contacted directly by the manager for the position.