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| **Job Description / Specification** |
| **Job Title:** | **Design Engineer** |
| **Reporting To**  |
| **Job Title:** | **Design Manager/ Senior Design Engineer** |
| **Location**  |
| **Department:** | NPD |
| **Organisation Structure** |
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| **Purpose of the Position** |
| Working closely with the Senior Design Engineer create innovative, robust and sustainable design solutions following best engineering design principles. Key to delivering the business strategy and exceed customer’s needs. |

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| **Key Responsibilities** |
|  | Complete medium scale complex projects in strict adherence to the requirements of the NPD Gate process.  |
|  | Design and develop a product/solution that meets all aspects of the project specification within required timescale.  |
|  | Demonstrate clear understanding and effectively communicate the rationale behind project specifications, challenging requirements where necessary. |
|  | Deliver effective and commercially viable design solutions with the help of FMEA ensuring the safety and reliability of all products.  |
|  | Accurately complete all relevant documentation to support all design solutions.  |
|  | Use appropriate design tools (i.e. sketches, hand-made models, prototypes and 3D CAD) to help communicate solutions clearly and efficiently. |
|  | Create accurate CAD, ERP and PLM data following best practice. |
|  | Create accurate costed bill of materials for all new product design.  |
|  | Review any cost drift when identified determining a solution to reduce costs and ensure communication to all key stakeholders. |
|  | Produce production capable components and assemblies. Performing research on product technologies and structures to implement into design concept. |
|  | Continuously improve on existing production designs and processes where possible, identifying and effectively implementing any improvements. |
|  | Continuously review product installation methodologies creating innovative solutions with supporting samples and installation leaflet. Ensuring a safe and easy experience for our customers.  |
|  | Identify and resolve problems by following a process to determine root cause. Implementing corrective action that ensures the problem does not return. |
|  | Maintain up to date knowledge on current industry trends and market conditions |
|  | Commercially aware of competitors products and remain up to date on market trends.  |

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| **Specific Skill Requirements** |
|  | **Essential** | **Desirable** |
| **Education / Technical Skills**  | * A degree in a relevant engineering or science discipline or equivalent.
* +2yrs industry experience delivering products from concept to customer. Delivering robust design solutions on time, to specification and within cost and budget constraints.
* Experience of creating 3D CAD following best practice guidelines, engineering drawings and tolerance stacks for mechanical/electrical components and assemblies along with test rigs and assembly jigs.
* Good level of understanding of Microsoft office namely Excel and PowerPoint.
* Experience of applying practical tools (sketch, calcs, handmade, 3D prototypes) to create fit for purpose prototypes for test purposes and review.
* Sound understanding of mechanical and physical principles.
* Ability to drive development of products and technologies through prototyping and testing.
* Understanding and practical application of design wheel / design processes.
* Good knowledge and understanding of multiple tooling and manufacturing techniques.
 | * Use of FEA tools to develop concepts with consideration for material failure.
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| **Behaviour**  | * Effective communication.
* Interpersonal / Team work.
* Organisation.
* Problem Solving.
* Adaptability.
* Effective Leadership.
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| **Document Management** |
| **Written By:**  | **Jack Johnson** | **Date: January 2021** |