
JOB DESCRIPTIONS: SENIOR ENGINEER - DESIGN

1. POSITION SUMMARY

JOB TITLE:	Senior Engineer - Design
EMPLOYMENT STATUS:	Permanent Only
LINE MANAGER:	Principal Engineer – Design, or his/her Deputy
LOCATION:	Shoreham-by-Sea
SALARY RANGE:	Dependant on experience
BENEFITS:	25 days + Bank Holidays paid leave per annum, Hybrid working (2-3 days working from home), Company Pension Scheme, Life Cover, Private Health Scheme, Ride to Work Scheme, Employee Assistance Program (EAP).

The 'Senior Engineer – Design' role is a key role within the design team, focused on timely technical delivery and quality of output. The team's Senior Design Engineers report directly to the Principal Design Engineer (and his/her Deputy), with several engineers in turn reporting to them, as part of a typical structure of Chief Engineer → Principal Engineer → Senior Designers → Designers.

The successful candidate will be responsible for managing several components and sub-systems within the management structure of the team, both from a technical delivery point of view, but also detailed technical leadership of ~3 engineers, as well as a number of their own designs.

The successful candidate will work closely with the Principal Design Engineers (and his/her Deputy) to maintain technical standards throughout the team, lead other technical staff and coordinate resource whilst creating suitable component and assembly designs.

2. JOB FUNCTION & RESPONSIBILITIES

2.1. JOB FUNCTION

- To take ownership of a number of key systems and parts, and to lead the associated design activities, to ensure the timely delivery of complete designs in accordance with development schedules and company design standards
- To work in conjunction with the Principal Design Engineer (and his/her Deputy) to ensure key performance and technical targets are met by the release of suitable part and assembly designs
- To assist in maintaining the required levels of technical quality in the output of the design team
- To technically review through completing of the Design Check process, the work produced by other Designers working within the same systems, against industry and company standards, and to contribute to the management of enterprise change

2.2. KEY RESPONSIBILITIES

- Technical leadership of up to ~3 design engineers, working on components and systems under your responsibility
- Chairing design reviews relating to systems under your remit; PDR, CDR, PPR, and compiling and circulating minutes from these meetings
- Managing and tracking your team's progress by way of reporting technical progress in line with company standard reporting methods
- Preparation of component and assembly designs, in the form of 3D models, 2D technical drawings and other associated technical documentation, with input from a combination of real-world testing, analytical study and engineering judgement
- Preparation of design release packs including supporting evidence such as basic calculations to support key design decisions
- Close cooperation with other key technical stakeholders, including analysis, systems, build & test to ensure the delivery of 'right first time', technically sound designs
- Ensuring one's own designs meet company design guidelines and standards
- Effective application of sound engineering principles and ones' own experience to produce suitable designs
- Review against departmental standards, the designs, drawings, specifications, and other technical product documentation as generated by the designers working within the same system, for Design Check
- Contribute to the management of enterprise change in the form of PR, ECR & ECN management
- Review technical progress in conjunction with the PE – Design (and his/her Deputy), to identify areas of risk and uncertainty, and contribute to the development of containment actions and plans

3. STANDARDS

- Clear positive work ethic with a desire to work to get the job done rather than working to the clock
- Maintain an enthusiastic, positive, calm and accommodating approach to work and changing priorities
- A high level of attention to detail, with an aspiration to achieve technical excellence, believing in 'good enough, is not good enough'.
- Commitment to the achievement of the company's long term business objectives

4. SKILLS AND EXPERIENCE

4.1. NECESSARY

- Bachelor's degree or higher in engineering or a relevant scientific discipline
- Technical leadership of a small group of staff (up to ~3 design engineers)
- Experience of:
 - Internal combustion engine design

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- Working within an environment of continuous and rapid technical change
 - Working within a production environment, where processes such as Change Management, PPAP, APQP, DFMEA etc are commonplace
 - A thorough technical understanding of core mechanical engineering principles (including, but not limited to):
 - Material selection, heat treatment, manufacturing and processing knowledge
 - Stress, strain, fatigue, creep, fretting, galling
 - Bolted joints
 - Fluid bearings, oil/hydraulic systems, seals
 - Basic tolerance analysis
 - DFM&A / DFx
 - Strong communication and interpersonal skills with the ability to operate as part of a team both within and outside of the Engineering department
 - Strong 3D CAD skills using Siemens NX design package, with excellent 2D technical drawing skills, and a thorough understanding of GD&T principles to produce drawings in accordance with BS8888 & the ISO GPS framework
 - Sound documentation capabilities and thus experience with Microsoft Outlook, Word, Excel and PowerPoint for examples
 - Product Lifecycle Management (PLM) software such as Teamcenter or Windchill
 - Management of BOM (bills of materials).