

R&D Design Engineer - Job Ref 163

Job Description

We are looking for a R&D Design Engineer to join our growing Engineering Design Team. You will be responsible for the mechanical design of assemblies related to experimental campaigns on our electromagnetic launchers and light gas guns.

As an engineer in First Light Fusion you will be designing and building state of the art technology to help push the company towards achieving fusion for energy generation.

Projects will range from complex target design and development to upgrading our existing pulsed power machines to improve their performance.

We believe this is an exciting and varied role as you will operate in a broad range of core projects in a fast-paced environment.

Responsibilities will include:

- Working with our Empirical Validation team and our internal workshop to develop target designs to a high level of accuracy and repeatability.
- Using 3D CAD to produce engineering drawings working to BS8888 following best engineering practice.
- Supporting the design process with technical specifications, design reviews and change management.
- Develop creative and practical R&D engineering solutions that enhance technology functionality and manufacturability.
- Providing expert engineering input into multidisciplinary teams
- Leading root cause analysis and engaging with our internal fault management processes.
- Ensuring manufactured components are delivered on time and as specified.

Essential

- You will have an HND or degree (BEng) in mechanical engineering.
- Solid engineering design experience using a mainstream CAD system. Training on the system used by us (Solidworks) can be provided.
- Understand DFMA principles for low volume R&D design and manufacture.
- Extensive experience with Geometric Dimensioning and Tolerancing (GD&T) and performing tolerance stack analysis.
- Fast and effective problem-solving skills
- Ability to work under pressure to tight deadlines.
- Strong communication and interpersonal skills
- Focus on safety and environmental impacts of your designs.

Desirable

- Ability to perform FEA analysis and engineering calculations.
- Experience with a drawing management system such as PDM.

First Light Fusion Limited

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- Experience of designing in a research environment with some of the following technologies: vacuum systems, laser systems, pressure vessels, high voltage, laser systems, cryogenics, lifting equipment.
- Knowledge of precision manufacturing techniques.

Benefits

- Competitive salary
- 25 days annual leave + bank holidays
- Free lunch, snacks, and soft drinks
- Cycle to work scheme
- Electric vehicle car scheme
- Flexible working
- 8% employer pension contribution without matching requirements

Additional information

[How to apply](#)

Please send your CV and covering letter to humanresources@firstlightfusion.com quoting the job title in the subject. If you don't hear back from us within four weeks, it means that unfortunately your application was unsuccessful at this time.

[Our commitment to equality, diversity, and inclusion](#)

We are a small company with a huge mission. The only important aspect for the team, and for everyone, is the contribution they can make. Our selection process and requirements for career progression disregard gender, gender identity, race, disability, colour, religion, and all other aspects of diversity that make us all humans. Diverse teams have been proven to be better and we strongly believe it.

