

Mechanical Design and Production Engineer

The Scientific Instruments Group is a small UK based Group of Companies the largest manufacturing company of the group being XCAM Limited.

XCAM (www.xcam.co.uk) is a rapidly growing technology business which manufactures highly bespoke, custom and low volume digital cameras for scientific, industrial, environmental and space applications. Currently our business requires us to make small numbers of highly complex, high value camera systems.

We are looking for a Mechanical Design and Production Engineer to join our growing team, who will play a key role in our Design and Production teams delivering mechanical engineering excellence to our product lines.

The suitable candidate will be required to carry out a number of varied tasks depending on the requirements of the business. Training will be provided where necessary.

We are ideally looking for someone who will work full time in this role. For suitably experienced candidates we may also consider a more flexible approach.

NOTE: This role is only open to non-smokers/non-vapers due the cleanroom work involved.

CVs and a covering letter should be submitted to a.heyda@xcam.co.uk

Job Description

Job Title	Mechanical Design and Production Engineer
Salary	£45-£50k pa - depending on experience; pension (up to +7.5% company contribution, sick pay)
Location	Round Spinney Ind Estate, Northampton, NN3 8RF
Reports to	Head of Projects and Operations
Hours of work	Full-time - Mon-Fri - 9am-5pm
Direct reports	None
Other key relationships	Design team members Production team members
Job summary	<p>In the role the role-holder will provide mechanical design and mechanical production excellence to support the development of XCAM's products.</p> <p>This involves the creation of conceptual and detailed designs for vacuum-compatible and in-vacuum camera systems using 3D CAD and the creation of manufacturing drawings for parts and assemblies, as well as supporting the procurement of such parts and assemblies maintaining good quality control and positive supplier engagement. The role-holder will also be responsible for mechanical production of the XCAM camera systems as part of the company's assembly, integration, verification and test procedures.</p> <p>In joining a small team, the ideal candidate is someone who, along with the required technical skills and knowledge, actively takes charge of their tasks whilst working under the close direction of project management. They must also be open to</p>

	contributing to the wider culture within the company to support other business units and colleagues from time to time.
Key responsibilities	<ul style="list-style-type: none"> • Mechanical design of camera system hardware and mechanical ground support equipment (MGSE) incorporating customer requirements and considering ease of production (assembly, integration, verification and test (AIVT)) • Generate and maintain mechanical CAD-related documentation inc. specifications and manufacturing drawings • Generate inputs to project lifecycle reviews/reports etc. and other related documentation • Support mechanical procurement activities and supplier engagement • Create, maintain and implement mechanical production processes • Commission and test MGSE set-ups • Support structural testing of hardware (where needed)

Person Specification

Job title	Mechanical Design and Production Engineer
Qualifications:	<ul style="list-style-type: none"> • Bachelor or Master's degree in mechanical engineering or equivalent engineering/science discipline, <i>plus</i> • 3+ years of experience working as a mechanical engineer performing tasks as per the key responsibilities <p><i>or</i></p> <ul style="list-style-type: none"> • 5+ years of experience working as a mechanical engineer performing tasks as per the key responsibilities
Essential Skills	<ul style="list-style-type: none"> • Proficient in Solidworks and Solidworks Simulation • Practical experience in mechanical assembly and testing of mechanical parts • Ability to produce accurate written records • Ability to follow accurately written procedures • Good IT skills and proficient using Microsoft Office • Proactive and self-managing • Excellent verbal and written communication skills
Desirable Skills	<ul style="list-style-type: none"> • Experience of mechanical design and the operation of vacuum systems • Experience of working in a cleanroom environment • Experience of FEA and/or thermal analysis
Professional knowledge	<ul style="list-style-type: none"> • Deep technical and practical knowledge of mechanical design and how design influences manufacture, assembly and test • Experience of design within the space industry and working knowledge of ECSS would be considered an asset
Work experience	<ul style="list-style-type: none"> • Experience working in a manufacturing environment • Experience of working in an SME or start-up environment
Competencies	<ul style="list-style-type: none"> • Will be positive, flexible and hardworking and work to high

	<p>standards</p> <ul style="list-style-type: none">• Ability to work under pressure when required, and deliver to deadlines• Professional work ethic• Willing to help out where needed outside the primary job role• Be a team worker• Have good communications skills both written and verbal
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