

Production Engineer (Electro-Mechanical)

Every successful product relies on someone who can bridge the gap between design and manufacture - spotting issues before they become problems, improving how things are built, and turning ideas into reliable, repeatable production.

That's where you come in.

As a Production Engineer at Scientifica, you'll be working on precision equipment used by scientists and researchers worldwide, supporting neuroscience research and wider life science applications - including work into neurological conditions such as Alzheimer's.

You'll join our Engineering team in Maidenhead, playing a key role in the build, integration and continuous improvement of our electro-mechanical product range at the heart of our manufacturing operation. This is a hands-on role, combining desk-based engineering with time on the production floor, where you'll see the direct impact of your work.

What you'll be doing

You'll act as the link between design and production, helping ensure products are efficient to build, easy to maintain and consistently delivered to a high standard.

Your day-to-day will include:

- Supporting prototype builds and production assemblies
- Investigating manufacturing and quality issues and driving them through to resolution
- Designing, maintaining and improving CAD models, drawings and engineering documentation
- Managing engineering changes and maintaining configuration control
- Creating build manuals and production documentation to support efficient assembly
- Designing and implementing tooling, jigs and fixtures
- Supporting testing, fault-finding and system integration
- Working closely with production, project and operations teams to improve performance and delivery

Who you are

You're an experienced engineer who combines technical capability with practical thinking.

You'll likely have experience in a manufacturing or electro-mechanical environment and be comfortable working both at your desk and on the production floor.

You'll bring experience in several of the following:

- Electro-mechanical assembly and manufacturing
- SolidWorks or similar 3D CAD software
- BOM management and engineering documentation
- Engineering change control (ECR/ECN)
- Root cause analysis and problem solving
- Product and process improvement

You'll stand out if you also have experience with electronics testing, Lean manufacturing, production tooling or MRP systems.

Why join us?

This is an opportunity to make a visible impact.

You'll help shape how our products are built, improving quality, efficiency and reliability in equipment used by leading research institutions and organisations worldwide.

You'll join a collaborative engineering environment where practical ideas are valued, ownership is encouraged and continuous improvement is part of how we work every day.

What you'll get

- £35,000-£45,000 – depending on skills, knowledge and experience
- 36.5-hour working week
- 25 days' holiday plus bank holidays
- Option to buy additional annual leave
- Pension contributions matched up to 4%
- Judges Scientific Share Incentive Plan, matched up to £900 per annum
- Life assurance (4x annual salary)
- Income protection
- Mediacash health cash plan
- Employee discounts

We believe great ideas and great work come from people with different backgrounds, experiences and perspectives. We're committed to creating an environment where people are treated fairly, feel respected and can do their best work. If this role sounds like a good fit for your skills and experience, we'd love to hear from you.

How to apply

You can apply by emailing your CV to Steph at peopleservices@scientifica.uk.com.

Our selection process includes a two-stage interview process, with a PPA assessment between first and second stage interviews. You'll also be asked to provide evidence of your education cited on your CV.

Please note that applicants must have the permanent right to work in the UK, as we are unable to provide visa sponsorship for this role.

Job Profile

Name	
Job Title	Production Engineer (Electro-Mechanical)
Department	Engineering
Location	Maidenhead
Reports to	Engineering Manager
Job Purpose	To support the design, build, integration, and ongoing improvement of mechanical and electro-mechanical assemblies across the company's product range, ensuring products can be assembled, tested, and manufactured efficiently and consistently throughout their lifecycle. The role is responsible for providing hands-on mechanical production engineering expertise that bridges design and production. This includes maintaining production-ready designs, developing build documentation, resolving technical issues, and improving manufacturing processes. The role also requires the ability to support electronic and electro-mechanical systems in a production environment, including basic testing and fault finding, ensuring effective system integration and reliable product performance.
Key Activities / Responsibilities	• Production Engineering & Build Support • Support assembly, test, and build activities across prototype and production units • Act as the primary engineering interface for production, resolving day-to-day technical issues • Ensure products are buildable, repeatable, and meet defined quality standards • Design, CAD & Configuration Control • Maintain and update 3D CAD models and production drawings (SolidWorks), including: • Modifying existing designs • Designing new components where required • Ensuring drawings are accurate, controlled, and fit for manufacture • Implement Engineering Change Requests (ECRs), ensuring all changes are fully documented, justified, and released through controlled processes. • Ensure alignment between CAD models, drawings, BOMs, and production documentation • Build Documentation & Technical Files • Create and maintain build manuals using SolidWorks Composer or equivalent tools • Compile and maintain product technical files and user documentation • Ensure all documentation reflects the current design baseline and supports production and compliance requirements • Process Development & Tooling • Design and implement jigs, fixtures, and tooling to improve build quality, repeatability, and efficiency • Identify and implement process improvements using practical manufacturing knowledge and Lean principles • Support New Product Introduction (NPI), ensuring products and processes are production-ready

- **Quality & Problem Resolution**
- Take ownership of Non-Conformance Reports (NCRs), including:
 - Investigation and root cause analysis
 - Implementation of corrective and preventative actions
 - Driving resolution through to closure
- Support troubleshooting activities across mechanical and system-level issues
- Reduce recurring issues through structured problem solving and continuous improvement
- **Electro-Mechanical & Electronics Support**
- Support testing and validation of electronic and electro-mechanical assemblies
- Carry out basic fault finding on PCBAs, wiring, and integrated systems
- Act as the primary point of contact for electronics-related production issues
- Liaise with external suppliers or design inputs where required to resolve faults
- Support system level troubleshooting across mechanical and electrical interfaces
- **Cross-Functional Working**
- Act as a key interface between design engineering and production, ensuring a smooth transition from design to manufacture
- Work with project and operations teams to resolve production issues and support delivery
- Honour our company values.



Key Performance Indicators

- Team Based –
- Design for profit
 - ECR on time and managed
 - NCR on time and managed
 - Delivering NPD project requirements on time
- Individual –
- Based on ongoing performance objectives

Personal Profile

Qualifications / Training	Degree or HNC or Apprenticeship in Mechanical / Production engineering Desirable: Membership of a professional institution (e.g. IMechE / IED) Desirable: Lean Qualification (Yellow Belt / Green Belt)	
Experience Required	Essential	Desirable
	- Hands-on Electro-Mechanical design and assembly - Prototype Assembly - BOM and part generation (e.g. Sage, MRP) - Experience in a production, manufacturing, or production engineering role - Experience providing engineering support within a manufacturing environment - Proficient in SolidWorks or similar 3D CAD software (including drawing modification and part design) - Experience creating build manuals and technical documentation (e.g. SolidWorks Composer or similar) - Experience owning or supporting NCR investigations and root cause analysis - Strong experience in problem-solving with a hands-on, ownership-led approach - Change management – ECR / ECN - Experience in driving Product & Process Improvements	- Use of Project Management tools - Production in-line and end-of-line testing - Sage 200 MRP - Cost Evaluation - Experience designing jigs, fixtures, or production tooling - Familiarity with Lean manufacturing and continuous improvement techniques - Experience working with electro-mechanical products - Basic experience in electronics assembly, testing, or fault finding - Understanding of programming or scripting languages (e.g. Python, C++, or similar).
Competencies and Skills	Core Competencies - Applies a structured, process-driven approach to problem solving - Proven ability to work effectively both independently and within multidisciplinary teams - Communicates clearly across face-to-face and digital channels, adapting to technical and non-technical audiences - Proactive approach with a strong sense of ownership and accountability - Uses initiative to identify and resolve issues with minimal supervision - Works effectively to deadlines, managing priorities in a production environment Technical Skills / Knowledge	

	• Familiarity with technical documentation and work instruction tools (e.g. SolidWorks Composer or similar) • Knowledge of engineering drawing standards (e.g. BS8888) • Strong software aptitude, with the ability to learn and apply new systems quickly • Practical knowledge of manufacturing processes and assembly techniques • Understanding of document control and engineering change management processes
Additional Role Requirements	Role is based in Maidenhead site with travel to the Uckfield site, suppliers and customers.

Team Member Acceptance	
I agree to accept the Job Description is a guide only and will be periodically reviewed due to the evolving nature of the business. I understand I will be required to take on other tasks and responsibilities from time to time, depending on the business needs.	
Signed	
Date	