



# THE WEST GROUP LIMITED

## Design & Supply of Fluid Control Solutions & Components

**Job Title:** Design and Test Engineer

**Opportunity:**

An excellent opportunity in a growing and fast paced engineering environment for an enthusiastic recent graduate of an engineering discipline. A chance to apply what they have learned throughout their studies, this varied role will enable the graduate to build and develop their knowledge and skillset in areas such as computer aided design, technical drawings, project management, and engineering analysis and testing.

**Job Role:**

Reporting to and taking direction from the Design, Test and Validation Engineering Manager and working closely with the Quality, Manufacturing and Technical Departments, the Design and Test Engineer will maintain an awareness of department objectives, targets and measurables. They will assist in the delivery of those targets through the effective implementation of a wide range of engineering skills, software and concepts.

The main purpose of the role is to take responsibility for assisting in all aspects of Engineering Development and Troubleshooting which occur within the lifecycle of The West Group's products, in accordance with the business long term strategy. This will be performed whilst always minimising cost, maintaining robust process and ensuring exceptional product quality.

**Technical Responsibilities:**

- Support the design and development of new product ranges to complement the existing West Group product portfolio, as directed by the Design, Test and Validation Engineering Manager.
- Working within the SolidWorks environment, produce 3D models and 2D technical drawings of new engineering products and concepts.
- Assist in design validation within the SolidWorks environment, running Finite Element and Computational Fluid Dynamics analysis on piece parts and assemblies.
- Support internal projects from concept to delivery in a high quality, timely and profitable manner.
- Lead the test and validation procedures for new concept assemblies and piece parts.
- Manufacture and assemble development prototypes as required.
- Carry out quantitative and qualitative analysis on design concepts (such as Design For Manufacture, Failure Mode Effects Analysis, etc.).
- Perform tolerance stack-up analysis and identify appropriate limits and fits where required.

**Technical Support:**

- Management of Non-Recurring Engineering budgets and expenditure.
- Train/coach operators in use of test equipment and processes.
- Work with all departments to ensure customer requirements are fully scoped and delivered.
- Reviewing of Project Definition Documents and generating an appropriate compliance matrix.

**General Responsibilities:**

- Visit and liaise with suppliers and customers as required.
- Maintain and report on project plans and mandated process documentation.
- Conduct risk assessments at the beginning of each project and update as circumstances change.
- Generation and maintaining of a design log for each project.



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- Technical drawing checking and approval where required.
- Any other task that may reasonably be required to meet the needs of The West Group Ltd within the remit of this post.
- Act as an ambassador for the company, promoting a positive image both internally and externally, demonstrating support of our strategic direction.

## **Required Job Skills:**

- Engineering knowledge stemming from an apprenticeship served, university degree or additional professional experience.
- Understanding of material selection.
- Understanding of fluid mechanics, solid mechanics and statics.
- Understanding of the specification and application of pneumatic components and systems would be a distinct advantage.
- Experienced in the use of 3D CAD systems (ideally SolidWorks).
- Experience with CAE software (such as FEA/CFD) would be advantageous.
- Understanding of engineering standards and work instructions.
- Familiarity of manufacturing practices and designing for manufacture.
- Ability to quickly gain an understanding of new concepts and design intent.
- Good project management skills.
- Personable, team worker, quick to learn and then work independently.
- Strong written and verbal communication skills.
- Basic understanding of electrical and electronics would be a distinct advantage.
- Familiar with standards, ISO9001, ISO13485 and BS8888.

You are required to adhere to the company standard terms and conditions of employment and to be aware of your duties as an employee of the company with regards to the quality management system, general standards, health and safety and confidentiality.