

Department:	Engineering
Reports to:	Project Manager

Main duties

We pride ourselves on designing innovative, bespoke and customised products for our customers. As an Electrical Design Engineer you will play an instrumental role in the development of the company's new and existing product portfolio. You will have a unique opportunity to see the product through its whole cycle from initial concept, design, manufacturing, and right through to on site installation.

Working in a small team you will often oversee your own projects you will take pride in a job well done and get a real sense of job satisfaction to see the product operating to the required standards and operational specification. Working within this fast paced environment you must be able to think on your feet when problems occur, be highly organised and self-driven to meet the quick turnaround of projects.

The Company's purpose, "**Creating a Better Way**", is a key driver for all positions within JMG and you will look for opportunities to improve how we do things. Our Core Values mean everything to us and it is how we recruit. We are looking for people who share our ethos of being;

Open & Honest **Helpful and Considerate** **Positive & Friendly**
Curious & Creative **Responsible and Reliable** **Productive & Mindful**

Key Responsibilities

1. To develop, oversee, evaluate and document product development through to testing and validation, of AC & DC control systems. This will include hardware, software and wiring practices.
2. Working on your own initiative and as part of a team, you will manage the on-time completion and delivery of your projects to a high quality and within budget. In addition, you will update the Project Manager on ongoing assigned work status.
3. To produce accurate BOM's, schematic design and layout drawings for projects and manage and liaise with customers on design specification and visual requirements.
4. Support existing product portfolio upgrades through modification of existing designs. Recommend improvements or modifications to existing electrical works if appropriate and to link in with Sales for any future opportunities to expand the company portfolio.
5. Ensure the design aspect of your assigned projects continues to meet and exceed internal and customer expectations including quality and conforms to applicable legislations and standards
6. Design looms and control systems using E-Plan and AutoCAD.
7. Liaise with electrical sub-contractors to ensure new designs are implemented to standard.
8. Test and validate new componentry and software solutions.
9. Ensure project related snag work is prioritised and completed promptly.
10. Stay abreast of new developments in control system technology to nurture innovative control solutions. This includes scoping new or alternative components.
11. You will work closely with other departments including sales, aftersales support, production, purchasing and quality as required.

Any other duties required in line with your job role

Essential Criteria:

1. Minimum 2-3 years' experience in a manufacturing environment.
2. Educated to degree or HND/HNC level in an Engineering discipline
3. Excellent analytical and problem-solving skills
4. Experience of producing Electrical Schematics using design software
5. Ability to read, understand and create electrical schematics and engineering drawings
6. Experience in BOM Creation, Draughting, Design for manufacture
7. A very high level of Quality awareness
8. Ability to assess workload and commit to realistic timelines.
9. Can identify risks both technical and commercial with proposed product change or new product

Desirable Criteria:

1. Experience of mobile equipment electrical & electronic systems, control products and programming software is advantageous although not essential.
2. A proven track record of managing the design of projects (Circa + £0.5m)
3. A sound working knowledge of AC/DC control systems up to 400Va
4. Knowledge of standard: IEC 13849-1

Person Specification Competencies;

Competency	Competency Level	Effective behavioural examples (taken from the Core Competency Framework)
Working with others	<ul style="list-style-type: none"> Ensures that interactions with all Stakeholders are conducted in professional and respectful manner Ensures that all relevant stakeholders are kept informed and up to date on status of engineering aspects Ensures that JMG Systems remains the Clients product provider of choice 	<ul style="list-style-type: none"> Promotes knowledge sharing within and beyond own team. Devotes time to others, listens to their views. Treats all stakeholders with respect.
Communicating with others	<ul style="list-style-type: none"> All communications and interactions are to be in a professional positive manner which are in line with our Core Values. Have excellent written and oral communication skills - All verbal communications to be followed up with an email to confirm any agreed actions Attend internal meetings and agree/confirm who is responsible for each action Ensuring timely communication is given to colleagues and customers regarding requests/issues to uphold excellent customer service and effectiveness within the service team. 	<ul style="list-style-type: none"> Achieves full understanding of others – their needs, roles, responsibility. Listens, clarifies to check understanding. Uses the most appropriate method, language, medium and style of communication for the situation and people involved
Influencing	<ul style="list-style-type: none"> Document discussions; who, where, when and record in your Diary for future references Communicate clear and concise factual information to strengthen your point of view Communicate in a professional manner and recognise when it's appropriate to set the tone of discussions as formal/informal 	<ul style="list-style-type: none"> Anticipates the needs of senior colleagues Varies style to have the maximum impact on the audience.

Making effective decisions	<ul style="list-style-type: none"> • Make informed decisions by establishing all the facts, investigate the various options available, consider the consequences and where appropriate discuss with colleagues/Management before concluding the decision. 	<ul style="list-style-type: none"> • Takes quick and well thought through decisions , seizes opportunities to move things forward • Thinks through the impact of decisions
Analysing and interpreting information	<ul style="list-style-type: none"> • Effectively use JMG systems software packages to gather all relevant factual information to analyse • Use communication boards/whiteboards to display key information/dates • Ask the right questions to the right people and record the questions/answers 	<ul style="list-style-type: none"> • Applies specialist and detailed expertise. • Actively promotes knowledge sharing and ensures that self and team(s) take account lessons learned
Planning and organising	<ul style="list-style-type: none"> • Effectively use your Outlook Calendar and Diary to book appointments and record key notes of meetings. • Use Outlook task reminders to ensure deadlines are met. 	<ul style="list-style-type: none"> • Ensures delivery against plans and forecasts accurately • Deadlines are met, prioritising effectively when issues or timescales conflict
Taking personal responsibility	<ul style="list-style-type: none"> • Accountable for following through with all agreed actions raised from meetings/site visits and achieving deadlines. • Learns from mistakes and documents this to prevent similar situations from arising. • Share best practice of outcomes to allow others to learn from experiences also. 	<ul style="list-style-type: none"> • Holds self and others fully accountable for standards of performance • Successfully deals with a range of difficult and often complex situations without support or guidance form others
Upholding ethics and values	<ul style="list-style-type: none"> • Understands and uses the Core Values in all interactions both internally and externally Open & Honest Helpful and Considerate Positive & Friendly Curious & Creative Responsible and Reliable Productive & Mindful • Act in a professional manner and positively promote 	<ul style="list-style-type: none"> • Upholds principles of fairness and equality • Acts with complete integrity

JOB DESCRIPTION:

Electrical Design Engineer (EDE0421/)



	the JMG Systems Brand.	
Coping with pace, setbacks and change	<ul style="list-style-type: none">• Effectively time manage your day by scheduling time for interruptions• Show resilience when change/ setbacks occur and use it as an opportunity to learn• Be open and honest in your communications, re-adjust and reset realistic time scales and inform others who may be impacted by this.	<ul style="list-style-type: none">• Adjusts quickly when priorities changes and takes prompt corrective action when things go awry• Adapts well to pressured situations and executes good control