



Position: Principal Design Engineer

About i4pd

i4pd is an employee-owned product design and development consultancy. Our company is an established brand with an excellent reputation for achieving a competitive edge for small and large businesses alike by bringing new or improved products to market. The company employs experienced and creative designers and engineers who operate out of i4pd's studio on the south side of Edinburgh. The team works collaboratively with our clients to augment their internal capabilities, supporting them to add functionality, reduce cost, increase visual appeal, enhance usability, and keep pace with the IoT revolution. Our clients include household names and those on their way to becoming leading consumer electronics and medical device brands.

About the Role

We are seeking a hands-on Principal Design Engineer who will play an important role in our leadership team. They will be someone with outstanding technical skills, a problem solver who is able to inspire, direct, engage and develop design engineers on a variety of projects.

As a technical lead on projects, you will be responsible for developing creative solutions to challenging problems associated with the design, development, and sustaining engineering for our clients' products. As a design partner to our clients and champion of their customers, we seek someone who will bring enthusiasm and passion to the product development process and will have a direct impact on the commercial success of their products. The successful candidate should be able to quickly embrace and implement our internal ISO9001 and ISO13485 QMS, ensuring their application whilst contributing to our continual improvement initiatives.

You will be located in our bright and open studio based 20 minutes south of Edinburgh city centre in stunning rural surroundings with views of the Pentland hills. You will be offered a competitive package which in addition will be complemented by way of a company performance profit share and cycle to work scheme. We recognise the value to our staff of maintaining a strong work, life balance which we foster through flexible and hybrid working arrangements whilst also supporting continual training and development.

Your Role:

- Managing and implementation of technical execution of multiple new product development programs.
- Lead and drive engineers assigned to projects by communicating the customer requirements and the project plan to meet or exceed project targets in schedule, budget, and quality.
- Injection moulding, over-moulding, and micro-moulding knowledge and experience preferred.
- Lead technical reviews.
- Responsible for guiding cross-functional teams through device design control processes with responsibility for translating technical project objectives into execution and specification levels.
- Expected to provide input to risk process, perform engineering investigations, and be a voice of knowledge for process development, problem solving, issue resolution and risk mitigation.
- Directs teams in the determination of corrective and preventative actions by considering impacts on performance, safety, costs, fielded product, manufacturing, and other factors.
- Work with project teams (internal and external) to anticipate and proactively propose solutions to avoid conflict or project bottlenecks.
- Be knowledgeable and experienced in test method development and validation.
- Ability to exercise independent judgment and draw conclusions based on available information.
- Create detailed 3D CAD models and 2D drawings using SolidWorks to a level similar to the type of products illustrated on our company website.
- Be able to perform Finite Element Analysis for stress and thermal modelling.
- Support the sales team by advising on potential design solutions and assisting in presentations.
- Act as the company's spokesperson on various engineering topics in webinars and blog posts.
- Be able to verify your own design and the designs of others.
- Coaching and supporting the team by ensuring they are progressing in accordance with allocated objectives.

Your Background:

- Mechanical Engineering Degree or related.
- Extensive experience of designing parts / assemblies suitable for manufacture by the injection moulding process; candidates must be able to demonstrate their knowledge by way of examples.
- **Minimum 10 years of industry experience** as a product design engineer, where designing efficiently, on time and to relevant standards is essential.
- Having a **consultancy background** is essential.
- Strong working knowledge of manufacturing processes including plastic injection moulding, high pressure die casting, CNC machining, sheet metal fabrication / pressings and cosmetic part finishing.
- Experience as a Senior / Lead Mechanical Design Engineer with commercial accountability and technical responsibility.
- Good knowledge of design regulations and quality standards (preferably in the medical sector).
- Candidates with 'hands on' engineering and prototyping skills will be particularly attractive.
- Can lead DFMEA process.

Email jobs@i4pd.co.uk quoting job reference '**Principal Design Engineer (PDE/02)**' and include the following;

- Your CV.
- A covering letter briefly describing the contribution your skills & experience would bring to the team.
- Visual examples of previous work in PDF format or a link to an on-line portfolio.
- Provide examples of injection moulded parts that have been designed by you (this is a pre-requisite). Any examples should initially be presented by way of electronic format e.g. JPG, but we are keen that the candidates' present examples of their previous injection mould design work by way of physical samples at interview stage.