



New Product Introduction Engineer

About ION Science Ltd:

ION Science has over 37 years of industry experience designing, manufacturing, and supplying PID gas sensors, gas detection instruments and leak detectors for a wide range of industries and applications. We are an unrivalled worldwide gas and leak detection company, with a team of workers who strive to deliver exceptional product quality and customer satisfaction. In 2022 ION Science was awarded the Queen's award for Enterprise for MiniPID Sensors. This is a fantastic opportunity to join our dynamic and growing team and be part of a well-recognised brand associated with quality.

MAIN PURPOSE OF JOB:

We are seeking a highly skilled and motivated NPI Engineer to join our dynamic team. The successful candidate will play a crucial role in the introduction of new world class gas detection sensors and instruments. This role involves close collaboration with cross-functional teams to ensure the seamless transition of products from development to production, maintaining the highest standards of quality and reliability.

MAIN RESPONSIBILITIES:

- Collaborate with R&D, production engineering, quality and manufacturing teams to develop and introduce new gas sensors and safety instruments.
- Drive NPI project activities, ensuring timelines, budgets, and quality standards are met.
- Translate product design requirements into robust, manufacturable, and cost-effective production processes.
- Develop and validate manufacturing methods, tooling, fixtures, test systems, and assembly procedures.
- Lead Design for Manufacture & Assembly (DFM/DFA), PFMEA activities and championing best-practice engineering.
- Lead NPI activities for internal and externally factored products
- Prepare and maintain detailed documentation during product development capturing details surrounding introduction to production.
- Conduct root cause analysis and implement corrective/preventive actions (8D, DMAIC, or similar).
- Ensure smooth hand-over to manufacturing, including training operations teams and completing process documentation.
- Work closely with Quality and Compliance teams to ensure compliance with relevant industry standards (e.g., ATEX, IECEx, UL, ISO 9001).
- Analyse build data, yield metrics, and performance trends to drive continuous improvement.
- Support early supplier engagement and selection, ensuring components and sub-assemblies are production-ready.
- Participate in programme reviews, risk assessments, and technical design discussions.
- Provide training and support to production teams on new products and processes.
- Support growth of lean manufacturing and six sigma principles within production.

**JOB ROLE:**

This is a hands-on engineering role focused primarily on transferring new product designs into a production environment. The role demands strong technical problem-solving skills, a collaborative mindset, and the ability to work across disciplines to deliver robust and reliable solutions.

QUALIFICATIONS:

- Degree level qualified in Electronics, Mechanical or a related engineering discipline
- Essential: 5 years + Industrial experience in relevant role
- Desirable: engineering experience in sensors and instruments.
- Desirable: experience in hazardous location ATEX design and certification EN 60079-11

SKILLS/EXPERIENCE:

- Proven experience in New Product Introduction, Manufacturing Engineering, or Process Engineering.
- Strong understanding of DFM/DFA principles, PFMEA and production process development.
- Hands-on experience with assembly processes (electromechanical preferred), test development, and process validation.
- Ability to interpret engineering drawings, schematics, and specifications.
- Strong problem-solving skills using structured methodologies.
- Excellent communication and cross-functional collaboration abilities.
- High level of attention to detail and commitment to quality.
- Desirable: Understanding of gas sensor technologies and safety instruments.
- Desirable: Proficiency in CAD software and other engineering tools.
- Desirable: Familiarity with regulatory and certification standards (ATEX, IECEx, UL, CE).
- Desirable: Knowledge of lean manufacturing, Six Sigma or continuous improvement tools.

BENEFITS:

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| • 25 days annual leave + Bank Holidays (annual holiday increasing with service) | • Monthly lunch & drinks laid on by the company |
| • Excellent employer pension contributions of 8% after probation | • Sick Pay |
| • Life Assurance of 4 times of pensionable salary | • Christmas party |
| • In-house training | • On-site parking |
| • Discretionary Annual Bonus | • Private Medical with AXA |
| • On site shower & changing facilities | • Bike Purchase Scheme |
| • Long term service awards | • Car share scheme |
| | • Early finish on Fridays |

WORKING PATTERN:

- Monday to Thursday: 08:30 – 17:00, Friday: 08:30 – 15:45
- Immediate start available
- Full time – Permanent position.

**LOCATION:**

This role is based at the ION Science head office, located in Fowlmere, 10 miles south of Cambridge. The role is required for you to be on site.

OUR CORE VALUES:

See what our employees have to say about working at ION: <https://ionscience.com/en/careers/>

Due to the high volume of CVs we receive, it might not be possible to provide feedback to all applicants. If you are successful, we will be in touch to arrange a call with our recruitment manager.