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| **Position:** | Lead Engineer – Materials Characterisation | **Job Holder:** |  |
| **Reports To:** | Ed Vernon-Harcourt | **Location:** | Portsmouth |
| **Prepared By:** | Ed Vernon-Harcourt | **Date:** | 24 June 2025 |

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| Overall Purpose of the Job:(state briefly why the job exists) |
| To lead the delivery of complex engineering tasks, focussed on materials dev elopement and characterisation, as part of Magma’s internal and customer projects. |

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| Principal Accountabilities(describe the important end results of the job i.e. what has to be achieved) |
| 1. | Lead the development of Magma’s materials characterisation, both internally and externally, and the associated processing and interpretation of data produced. |
| 2. | Develop and maintain technical relationships with Magma’s sub-contractors who provide materials testing services and resolve any technical issues that may arise. |
| 3 | Lead the technical qualification of suppliers (e.g for new materials or changes in existing materials) and the technical relationship with key supplier(s) (e.g. drive Technical Steering Committee, execute joint developments projects) |
| 3 | Lead the investigation and development in response to challenges and requirements with the manufacture, testing of properties and processing of materials and the laminates that they form. |
| 5. | Maintain an external reputation in materials testing communities that are relevant to Magma’s products through active participation in JIPs, conferences, and seminars. |
| 6. | As one of the Process Technology Development Leadership Team, mentor other team members and contribute to the development of Magma’s technical capabilities across the Team. |
| 7. | Work with Magma’s other functions (e.g. Sales, Product Development, Quality and Test) and TechnipFMC (Supply Chain, others Product Lines) to ensure the compatibility of materials testing solutions with the wider business capabilities. |

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| Health & Safety |
| **As an employee, you shall take responsibility to ensure that you:*** Understand and comply with the documented controls and processes (including QHSE Procedures, Risk Assessments and COSHH Assessments) developed to reduce the likelihood of harm to people, property and the environment to as low a level as is reasonably practicable.
* Actively contribute to the progressive improvement of all documented controls and processes (including QHSE Procedures, Risk Assessments and COSHH Assessments) developed to reduce the likelihood of harm to people, property and the environment to as low a level as is reasonably practicable.
* Take personal and legal responsibility for your own Health and Safety and that of others who may be affected by what you do or don’t do.
* Actively intervene in any unsafe act or condition that may be identified.
* Co-operate with the Management Team so far as is necessary to ensure that the requirements defined in the Integrated QHSE Management System are performed or complied with.
* Ensure that any PPE issued or made available is used, maintained correctly and any loss or damage is minimised.
* Immediately reporting any unsafe or potentially unsafe acts or conditions to your Supervisor or any member of the Management Team.
* Actively reporting any errors, omissions or potential improvements identified in the Integrated QHSE Management System and the associated controls or processes.
* Comply with all Client QHSE controls, processes and other QHSE related requirements on Client work sites.

**Responsibilities of Managers and Supervisors*** Demonstrate correct health and safety behaviours and actively encourage the personal ownership of and commitment to the effective implementation of the Integrated QHSE Management System throughout the business.
* Actively intervene in any unsafe act or condition that may be identified.
* Take full personal and legal responsibility for the health, safety and welfare of all personnel who report to you (Duty of Care) and in particular ensuring the following:
* Provide and maintain a safe place of work
* Develop and implement safe working methods
* Provide competent fellow workers
* Provide effective supervision
* Participate in the regular safety tours within your area of responsibility and ensure that effective remedial action is taken in a timely manner with regard to all deficiencies or improvements identified.
* Contribute to the progressive improvement of all documented controls and processes, including the QHSE Procedures, Risk Assessments and COSHH Assessments, developed to reduce the likelihood of harm to people, property and the environment to as low a level as is reasonably practicable.
* Actively participate in the investigation and the identification of corrective and preventive actions and the root cause analysis with regard to all incidents and near misses relating to the personnel, property and the environment within your area of responsibility.
* Ensuring that the Managing Director is immediately notified of any QHSE related issues or concerns that cannot be easily resolved.
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| Organisation(show job titles) |
| **Line Manager** | Head of Process Technology Development |
| **Other jobs reporting to the same supervisor:** | Members of the Process Technology Group |
| **Immediate subordinates:** | Materials & Senior Materials Engineers |

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| Authority & Responsibility(define financial and supervision levels) |
| * No purchasing authority above standard Magma purchasing limits.
* No authority to sign for, commit Magma to, or accept contractual agreements.
* Line manager for Materials & Senior Materials Engineers (1 person - December 2024)
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| Relationships(who are the job holder’s most important contacts & for what purpose) |
| * Head of Process Technology Development – line manager.
* Materials Team Members – managing the delivery of materials testing work packages for Magma projects.
* Project Managers – providing materials characterisation leadership to project teams working on Magma’s internal or customer projects.
* Head of Product Engineering - supporting the development of new and existing products with appropriate materials data.
* Head of Test – supporting the development of internal materials testing capability.
* Quality Assurance Manager – supporting the development of appropriate materials quality assurance tests
* Supply Chain – providing technical support in the relationship with materials suppliers
* Business Development Team Members – providing technical support as part of the sales process related to materials characterisation.
* Materials Suppliers – defining specifications for incoming materials to ensure they meet the technical and economic performance requirements of the product.Clients – delivering successful material characterisation programmes to external clients.
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| Job Challenges(identify the most complex or demanding aspects of the job) |
| * Managing activities in a dynamic environment where there are often changes to requirements.
* Developing a materials characterisation strategy for Magma’s products that accounts for the requirements of Magma’s clients, independent verification agents, and current materials testing capabilities both internally and externally.
* Balancing the technical advantages of developing new materials testing methods or capabilities against the commercial constraints of the business.
* Providing leadership to the wider business so that long-term goals of materials characterisation for Magma’s products are met in addition to dealing with short-term challenges.
* Delivering materials characterisation solutions to complex problems within a commercially viable timeframe and budget.
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| Job Knowledge & Experience(essential background education, skills & aptitudes, specialist training and experience to perform the job competently) |
| * Education – Batchelor’s degree or Ph.D in a relevant engineering discipline.
* Experience – 15+ years industrial experience.
* Technical Skills – expert in composite and polymer material characterisation (required), detailed practical knowledge of composite and polymer materials testing methods (required), knowledge of Advanced Fibre Placement (AFP) manufacturing techniques (desirable), knowledge of the commercial drivers of subsea production systems and well intervention services (desirable).
* Interpersonal Skills – energy and enthusiasm for tackling challenging engineering problems, team player, good communication and scheduling skills, line management, experience managing clients and suppliers and being part of a Materials & Process Leadership Team.
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| **Job Description Agreed by:** |
| **Job Holder:** |  | **Date:** |  |
| **Supervisor:** |  | **Date:** |  |