Job Description

ROLE TITLE: Manufacturing Equipment Specialist
Reports to: Technology Programme Manager

Direct reports including contractors: None
Budget: None
Key relationships: Director of Engineering, Chief Technology Officer, Head of Delivery – Internal & External Capability, Engineering Continuous Improvement Team, IT team, Estates team, Procurement Team & QHS&E team.

ROLE PURPOSE:

- To manage Capital Acquisition and continuous improvement projects carried out at NCC HQ or associated sites. Accountable for the reporting of projects to the Capital Acquisition & Engineering department(s). Responsible for proposing new projects and working with other members of the department to ensure proposals are well defined and meet the needs of the business.
- Responsible for the oversight of all new equipment procurement and existing equipment upgrades for the NCC. This will involve early stages market survey engagements and eventually creating tender specifications, working closely with IT, estates & procurement, finding the most appropriate upgrade solutions and liaising with the various engineering team and the supply chains. Separating the business 'need' from the engineering 'want' will be an essential task that is needed to be able to make recommendations to the business.
- Represent Director of Engineering as a member of the engineering continuous improvement team.
- To support and provide oversight for the working relationship and fundamental systems necessary to engage with the University of Bristol.
- Accountable for root cause investigations into manufacturing equipment failure and process failures.
- To provide support to the business with 'Digital' projects at the NCC, this will include finding opportunities for digital projects to interface with manufacturing equipment and processes as well as pursuing opportunities for funding digital initiatives.

MAIN ACTIVITIES:

TECHNICAL:

- Broad technical engineering and facilities knowledge to evaluate and support with the selection and implementation of new equipment and any required services on a given operational site.
- Excellent level of engineering understanding and awareness to enable deep understanding of process and equipment requirements to ensure delivery of the equipment program within cost and time limits.
- Understanding of facilities services schematics and drawings and general engineering drawings.
- Support the formulation and establishment of NCC engineering capital wish list. You will appraise and revise proposals ensuring strategic alignment for short and long term roadmaps in collaboration with the engineering team.

- Integrate, advise and influence all technical tasks; developing engineering outcomes. This may be across multiple-disciplines but will focus closely on the upgrade and modernisation of existing equipment and the future-proofing of new equipment to suit NCC's ongoing aspirations.
- You will provide manufacturing and equipment technical specialist authority and guidance on projects and technical capability/strategy development, specifically where procurement of new equipment is required, or the upgrade of existing equipment.
- You will foster innovation in others and have technical autonomy in Capital Acquisitions. This level of innovation is often revolutionary and may include establishing new or novel technical capabilities or processes.
- Create and revise technical documents for equipment procurement, modification and disposal. Champion the capture and dissemination of technical information to internal and external customers and networks.

SUPPLY CHAIN:

- Develop existing and new collaborative relationships with Universities and other RTO's to champion the advancement of new technology and manufacturing processes in line with project need and the NCC's Technology, Sector & Capability aligned roadmaps.
- A good networking skill in both pre-procurement market research and ongoing collaboration with suppliers. Surveying the market to understand trends, identify potential suppliers, and inform the design of ultimate procurement strategy, while ongoing supplier engagement focuses on building strategic, collaborative relationships to drive innovation, efficiency, and achieve mutual business goals.
- Supporting supplier relationships and customer interactions within research engineering procurement activities to ensure a successful tender outcome.
- Maximising supplier value to the NCC through developing insights of suppliers' business, structure and needs and identifying opportunities and solutions (with support from specific engineering teams where appropriate).

CUSTOMER/SUPPLIER INTERACTION:

- Establish effective partnerships across boundaries both internally and externally. You will have broad technical networks nationally and/or internationally and be regarded as an expert in your specialist field.
- Represent the NCC in relevant technical forums and champion our technical strategy/road map.
- Utilise your network of internal and external contacts to seek creative ways to develop and influence strategic collaborative partnerships e.g. bringing together teams of technical experts on the grounds that have similar technical interests and may be able to collaborate in an innovative way to enhance NCCs technical capabilities.

QHS&E:

- Support Head of Engineering & Manufacturing Systems in establishing and operating KPIs aligned to overall business objectives to measure the effectiveness of technology development and continuous improvement.
- Responsible for ensuring Health & Safety documentation is in place; in line with regulations and NCC policy.
- Ensure that all activities are carried out in a safe, managed and lawful manner, compliant with all relevant legislation.
- Potential zone ownership responsibilities for relevant areas.

This Job Description is not an exclusive or exhaustive list of all activities that an individual in this position may be asked to perform. You may be required to undertake other responsibilities or activities, as requested by your line manager, to support your team or wider NCC activities.

PERSON SPECIFICATION

Essential	Desirable
Qualifications/Experience ▪ Degree in Mechanical/ Materials or Manufacturing Engineering or other relevant degree/qualifications with significant experience ▪ Years of experience in an engineering environment preferably related to capital related projects ▪ Demonstrable knowledge of equipment procurement processes and commissioning ▪ Understanding of continuous improvement processes ▪ Able to manage scope creep against project budget ▪ Ability to manage tight project timelines	Qualifications/Experience ▪ Masters in Mechanical/ Materials Engineering or other relevant degree/qualifications ▪ Substantial engineering experience with composite materials ▪ Research experience in the composites field and ability to carry out innovative research and development programmes. ▪ Excellent knowledge and networks in the composites field and a track record of carrying out innovative research and development programmes. ▪ Experience of writing technical proposals for procurement activities or to support research funding calls ▪ Demonstrable experience investigating and resolving process related problems (PIR's) ▪ Experience conducting audits
Behavioural Competencies ▪ Presents a professional image in all circumstances including relations with internal and external customers, visitors and other stakeholders ▪ Able to earn the trust and confidence of colleagues through the competent and timely completion of tasks ▪ Actively seeks out opportunities ▪ Actively manages customer expectations, communicates openly and honestly ▪ Proven ability to synthesise technical solutions and strategies and develop substantiated conclusions ▪ Competently address engineering problems involving uncertainty, ambiguity, wide ranging and sometimes conflicting technical and non-technical factors ▪ Demonstrable ability to conceptualise alternative engineering approaches and evaluates potential outcomes against	Behavioural Competencies ▪ Openly share information to facilitate the accomplishment of broader objectives. ▪ Review and report on safe working practices; highlight potential risks and hazards and work with others to improve safe working practices. ▪ Recognise and highlight the need for risk/COSHH assessments. Assist with their creation and follow-up on actions. ▪ Contribute to route cause analysis and non-conformance investigations/reports. Suggest future improvement to minimise risk of repeat issues. ▪ Experience of developing and implementing technical/business processes

Essential	Desirable
appropriate criteria to justify an optimal or novel engineering solution ▪ Demonstrates and champions the value of alternative and multi-disciplined viewpoints, academic advice and the importance of professional networking ▪ Knowledge of broader fields of science, engineering and technology from which new ideas and interfaces may be drawn and readily engages with professionals from these fields to exchange ideas and exploit collaboration opportunities. ▪ Proven ability to seek out novel developments in your engineering specialisation and apply specialist knowledge and systematic processes to evaluate and justify potential ▪ Able to prepare exemplary engineering documents and presentations pertinent to the audience ▪ Able to represent the NCCs short-long term strategic technical engineering position to the broader community ▪ Able to express complex/specialist technical information effectively and succinctly, issuing instruction, engaging in discussion, formulating arguments and justification, debating and negotiating – to technical and non-technical audiences and using appropriate media best suited to the audience and context ▪ Has professional gravitas, smart and confident as a technical ambassador of the NCC	▪ Experience of managing time, cost and quality in engineering projects ▪ Understands the importance of being a member of a professional technical community, learning from its knowledge and standards and able to actively contribute to its advancement