**Role Description**

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| **Role Title:** | | Process Engineer |
| **Department:** | | Process Engineering |
| **Reporting To:** | | COO |
| **Business Overview & Purpose of Role:** | | |
| CSS have developed a modular gasification technology (Micro-Hub) for the production of syngas, hydrogen, power, heat, and carbon credits. Our latest product, the MicroH2-Hub has a small footprint, can be located on-site, produces 30kg of hydrogen/hour plus 500kWe of power from 10,000 tonne of Solid-Recovered-Fuel (SRF) / Wood Chip per annum. The hydrogen is separated from syngas using our patented gasifier and inhouse developed Pressure Swing Absorption system.  This is a great opportunity to join a growing team - you will be working within the senior management team, leading on all process engineering, process safety, change management, R&D projects, test & commission, developing systems, tools, procedures, processes & controls whilst further supporting the broader internal business units and leadership team. | | |
| **Main Responsibilities & Tasks:** | | |
| 1. | Provide a lead on all process engineering & process safety activities | |
| 2. | Take a lead on all R&D project related activities | |
| 3. | Provide technical expertise to resolve process issues that may impact quality, cost, and risk | |
| 4. | Oversee and assess existing processes and workflows | |
| 5. | Optimise productivity by designing, implementing and testing new procedures | |
| 6. | Assemble reports to document process status and changes | |
| 7. | Track metrics to discover areas for improvement and monitor upgrades | |
| 8. | Communicate findings and proposals to upper management | |
| 9. | Utilize process simulation software to test & find the most appropriate production strategy | |
| 10. | Provide thorough instructions for successful implementation of process changes | |
| 11. | Undertake process safety risk assessments and implement robust controls | |
| 12. | Assess compliance with applicable safety and quality standards | |
| 13. | Adhere to all Health, Safety and Environmental procedures/processes | |
| 14. | Promote a positive safe working culture | |
| **Knowledge & Skills:** | | |
| **Required:** | | **Desired:** |
| * Process Engineering background | | * Gasification/Pyrolysis background |
| * Project Management background | | * PSA / Hydrogen / SAF background |
| * HAZOP/HAZID experience | | * Familiarity with applicable HSE regs |
| * Proficient with process engineering software | | * Strong written & verbal communication skills |
| * Change management understanding | | * MS Project experience |
| * Excellent analytical skills | | * Project Delivery skills |
| * Ability to identify, assess, solve problems | | * IT Literate ( MS Office) |
| **Education, Qualifications and Technical Skills:** | | |
| * Masters degree or doctorate in material process or chemical engineering * Bachelor's degree in industrial or chemical engineering * 6yrs+ working within material process or chemical engineering environment * Knowledge of process engineering techniques, models and associated software packages * Project Management experience * Previous experience working with CAD and AutoCAD * Hazop/HAZID processes experience * Health & Safety qualification (an advantage) | | |
| **Key Responsibilities of the Role**   1. Operational Activities | | |
| * Primary responsibility for process engineering activities * Responsible for all process safety activities * Supporting Design/Hazop/Hazid processes * Provide a lead on all R&D projects * Reviewing, developing and implementing robust policies, procedures & processes * Develop R&D process engineering improvement strategies * On occasions you may need to support shift operations * Oversea work may be required in future | | |
| 1. Health, Safety & Environment | | |
| * Co-operate in the prevention of work-related accidents and ill health, and the promotion of environmental good practice. * Adopt behaviours that are consistent with an interdependent HS&E culture. * Be prepared to challenge behaviour and conditions that undermine our HS&E standards. * Follow HS&E procedures and local management instructions. * Report all unsafe processes, practices, behaviours, or HS&E concerns to your line manager. * Report all HS&E accidents, incidents, ill health and near misses to your line manager. | | |
| 1. Record keeping | | |
| * Act as the owner of the Change Management process * Act as the owner of the Hazop/Hazid and broader process related risk management tools * Provide a lead on data acquisition, analysis and reporting of plant performance | | |
| 1. House Keeping | | |
| * Ensure good housekeeping is adopted at all times | | |
| 1. General Duties | | |
| * To undertake any tasks required when requested by your line manager. * Prepared to undertake any necessary training. * Act as a Team player within the team. | | |

Acceptance

Process Engineer Name:

Signature: ……………………………………………………..

Date: