**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
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| * Project Management background
 | * PSA / Hydrogen / SAF background
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| * HAZOP/HAZID experience
 | * Familiarity with applicable HSE regs
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| * Proficient with process engineering software
 | * Strong written & verbal communication skills
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| * Change management understanding
 | * MS Project experience
 |
| * Excellent analytical skills
 | * Project Delivery skills
 |
| * Ability to identify, assess, solve problems
 | * IT Literate ( MS Office)
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| **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)
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| **Key Responsibilities of the Role**1. Operational Activities
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| * 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
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| 1. Health, Safety & Environment
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| * 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.
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| 1. Record keeping
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| * 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
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| 1. House Keeping
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| * Ensure good housekeeping is adopted at all times
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| 1. General Duties
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| * 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.
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Acceptance

Process Engineer Name:

Signature: ……………………………………………………..

Date: