

Job Title:	CAD C& I Designer
Location:	Glasgow (requirement to visit other locations, including Customers sites.)
Responsible To:	CAD Manager – Hydrogen and Clean Energy Division
Direct Reports:	
Review Date & Rev No	16 Jan 24 r1

Purpose of Job:	<p>The function of the CAD Control and Instrumentation (C & I) Designer is to translate C&I Engineering requirements into workable technical designs / solutions for Hydrasun projects.</p> <p>The CAD C & I Designer is responsible for supporting the delivery of C&I product and project requirements, ensuring requirements are technically fit for purpose and in compliance with relevant legislations, standards, and industry guidelines. He / She is expected to understand control and instrumentation design requirements and produce relevant and complete design packs to latest industry standards.</p> <p>The selected candidate is expected to take an active role in Hydrasun's growing Energy Renewable (Hydrogen) sector.</p> <p>This role may require intermittent travel to project sites for occasional meetings and surveys. He / she must be organized, a multi-tasker and able to work effectively in a fast-paced environment.</p>
Key Areas of Responsibility:	<p><u>Technical Duties</u></p> <ul style="list-style-type: none"> • Undertake design and CAD activities associated with control and instrumentation scope, including, control logic, instrument wiring diagrams, alarms and trips and knowledge of control systems both on DCS and SIS. • Responsible and accountable for remaining within allocated budget (man hours and materials) and other design targets of optimising final cost and schedule to assigned work scope. • Responsible for ensuring all designed items are fit for purpose. • Responsible for all activities pertaining to the assigned work scope, as set by the Lead Engineer / CAD Manager. This includes but is not limited to: conceptual design and layouts; design packages/procedures preparation. • Supervise relevant activities assigned to 3rd Party contractors within assigned work scope. • Undertake allocated onsite activities, including: <ul style="list-style-type: none"> ✓ Design package changes and improvements ✓ lessons learned ✓ As built designs • Responsible for ensuring all relevant information of subcontractors, equipment and tooling for the assigned work scope is given to the Lead Engineer, QHSE and Fabrication, Inspection & Mobilisation Departments to enable adequate Quality Control to be performed on them. • Responsible for initiating actions to prevent non-conforming condition or product. Initiating, recommending or providing solutions to non-conformances. Verifying the implementation of corrective action and ensuring that these have been effective and controlling further work until the deficiency or unsatisfactory condition has been corrected and the root cause resolved.

	<ul style="list-style-type: none"> Review and be familiar with Engineering & Operation Department specifications, design drawing procedures and conform to the Company's Document Management System, the specific requirements of the Client and other governmental and/or statutory bodies. To become familiar with and to maintain awareness of Hydrasun's current requirements and where applicable, the latest Industry Codes and Standards including statutory rules and regulations. To ensure that all activities are carried out in a manner consistent with Hydrasun's policy on health, safety, quality and environmental matters in accordance with Hydrasun specific procedures. To ensure his/ her own safety and that of others is not compromised or placed at risk.
Interfaces (Internal/External):	<ul style="list-style-type: none"> QHSE Department, Engineering Department, Fabrication Workshop and onsite services. Client, Client provided subcontractors, 3rd party Certifying Authority and subcontractors.

Qualifications:	<i>Essential</i>	<i>Desirable</i>
	<ul style="list-style-type: none"> Qualified CAD technician specialising in C&I BTECH or BEng degree in Control and Instrumentation Engineering or equivalent 	<ul style="list-style-type: none"> Significant and demonstrable experience in oil / gas / energy / utility / equipment manufacturing sectors or other related industry
Experience Required:	<i>Essential</i>	<i>Desirable</i>
	<ul style="list-style-type: none"> Instrument Specification understanding Understand control logic Understanding of controllers/PLCs Ability to produce wiring diagrams Ability to produce cause and effect diagrams Experience in programming Allen Bradley, GE, Siemens etc PLCs. Knowledge in overall plant control via HMI, DCS, SIS Knowledge in the application of international codes and standards (ISO/ISA, BS EN, API, etc). Compiling project documentation Knowledge in F&G, ESD & PSD systems Knowledge of installation & commissioning of control systems Ability to produce wiring I/O wiring diagrams, I/O Lists, loop drawings, interface drawings, junction box & cable schedule, instrument hook-up drawings Advanced CAD capability, including 3d modelling and simulation 	<ul style="list-style-type: none"> New Product Development Renewable / Hydrogen Industry
Skills/Training Competences/Abilities:	<ul style="list-style-type: none"> Excellent attention to detail Ability to work effectively in a fast-paced environment with changing priorities Excellent written and verbal communication skills Good organisational and administration skills 	<ul style="list-style-type: none"> Knowledge of materials and processes used within the Hydrogen industry.

	<ul style="list-style-type: none">• Ability to maintain a professional and focused approach at all times, in particular in customer facing situations• Keen to develop personal knowledge and skills	
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Please note that you may be requested to undertake other duties from time to time and it is possible that your duties may change over time. You will be expected to co-operate with all reasonable requests. If the changes are deemed to be longer term then this job description will be revised.

Signature of Job Holder: _____ Date: _____

Name in Capitals ()

Signature of Manager: _____ Date: _____

Name in Capitals ()