# **Job Description**

### 1. Main Purpose of Position

To lead multi-discipline design teams to produce the designs for plant and equipment. These designs will cover the full project life cycle from concept design through to manufacture and commissioning.

## 2. Specific Areas of Responsibility

- ✓ Produce, check and manage the production of concept, scheme and detail designs.
- Produce, check and manage the production of technical documents.
- Undertake hazard analysis and risk reduction on designs for CDM compliance and CE marking.
- ✓ Produce designs that conform to relevant legislation, harmonised standards and client requirements.
- Undertake optioneering and design studies, producing reports on outcome while making recommendations.
- Ensure designs addresses operability, maintainability, constructability, manufacturability and safety requirements.
- Conduct design reviews to demonstrate compliance with relevant legislation, harmonised standards and client requirements.
- Management of internal and external design interfaces.
- ✓ Liaison with suppliers for external design subcontracts.
- Ensure compliance with Design Quality Plans.
- Produce and maintain technical files in accordance with NIS Quality Assurance requirements.
- ✓ Produce Design Justification Reports that demonstrate designs mitigates all technical risks identified.
- Produce a level of information (drawings, specifications, works instructions etc.) that enable manufacturing to take place.
- Ensure designs meet the required project programmes, budgets and quality.
- ✓ Support the Business Creation process, being the technical lead within bid teams.

### 3. Technical Competency & Development

- Highly experienced with design of complex mechanical systems, including
  - o Robotics and automation systems
  - Materials handling equipment
  - Remote handling systems



# **Principal Mechanical Engineer**

- Pneumatic and hydraulic systems
- o Containment and shielding systems
- o Decommissioning systems
- ✓ Proven capability to manage multi-discipline design teams to deliver engineering projects within time and budget.
- ✓ Ability to present designs to internal audiences and clients.
- ✓ Knowledge of CDM and CE marking requirements

#### 4. Additional Tasks

- ✓ Actively participate in the development of NIS' Engineering Department skills, tools and techniques.
- ✓ Undertake design estimates to support business development activities
- ✓ Be line manager for allocated engineering teams, providing supervision, mentoring and undertaking periodic staff appraisals.
- ✓ Act as Chair and provide records for technical meetings
- Carry out any other tasks within the job holder's capability as requested by the Engineering Manager

# 5. Reporting Relationships

**Reports to**: Head of Engineering **Reportees**: Assigned design team

#### 6. Standards

- Compliance with company procedures and policies.
- ✓ Display a professional, acceptable attitude and image for all work associated with and undertaken on behalf of NIS Ltd.
- ✓ Champion and up hold the NIS values: Respect, Commit. Protect , Inspire

Signed [TITLE]:	Date:	
Signed [LINE MANAGER]:	Date:	



# **Person Specification**

Qualifications	Essential	Desirable
Relevant Engineering degree	<b>√</b>	
Chartered Engineer or progressing towards	<b>√</b>	

Experience & Knowledge	Essential	Desirable
Substantial experience in similar role	✓	
Nuclear engineering experience		✓
Management of design teams	✓	
Robotics and automation systems	✓	
Materials handling equipment	✓	
Remote handling systems	✓	
Pneumatic and hydraulic systems	✓	
Containment and shielding systems		✓
Decommissioning systems		✓
Risk assessment technique		✓
HAZOP/HAZID		✓

Skills & Abilities	Essential	Desirable
Understanding of the requirements of CE marking and CDM regulations	✓	
Ability to produce technical reports and documents	✓	
Resource management and planning skills	✓	
Design estimating	✓	
Presentation skills	✓	
3D CAD user		<b>√</b>

Other	Essential	Desirable
Commercially aware	✓	
Self-motivated	✓	
Work to deadlines and tight timescales	✓	
Ability to obtain security clearance	✓	
Able to work away from home for short periods	✓	
To work in accordance with NIS polices	✓	

