

Job Description

Main Purpose of Position

The Senior Mechanical Design Engineer will be responsible for producing concept, scheme and detail designs for NIS projects.

The engineer will work within a multi-discipline design team and be responsible for undertaking the design of equipment as delegated by the Principal Engineer or Engineering Manager.

Work will either be undertaken individually or by managing a small team of mechanical design engineers.

Specific Areas of Responsibility

- ✓ Produce design concepts / layouts.
- ✓ Carry out technical risk analysis on designs for CDM compliance and CE certification.
- ✓ Produce designs that conform to the relevant British and European standards and client requirements.
- ✓ Produce design documentation.
- ✓ Produce and maintain a technical file in accordance with NIS Quality Assurance requirements.
- ✓ Ensure that the design addresses operability, maintainability, and safety issues.
- ✓ Produce designs that meet with project programmes and budgets.
- ✓ Produce design justification reports that demonstrate the design mitigates all technical risks identified.
- ✓ Produce a level of information (drawings, specifications, works instructions etc) that enable manufacturing to take place.
- ✓ Check drawings and documentation appropriate to competency.
- ✓ Undertake design studies and produce reports on outcome while making recommendations.

Reporting Relationships

Reports to: Mechanical Engineering Manager (Line Manager)
Principal Mechanical Engineer (Project Assignment)

Reportees: Mechanical Design Engineers

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

Person Specification

Qualifications	Essential	Desirable
Relevant engineering degree		✓
Chartered engineer		✓

Experience & Knowledge	Essential	Desirable
Minimum 5 years engineering background	✓	
Broad based engineering experience in design	✓	
Design of glove boxes and glove box equipment		✓
Machine safety directives		✓
Pneumatic and hydraulic principles		✓
Materials and mechanical handling techniques	✓	
Intimate knowledge of drawing principles and standards	✓	
Understanding of the requirements of the CE marking and CDM regulations		✓
Nuclear engineering		✓
HAZOP/HAZID		✓

Skills & Abilities	Essential	Desirable
Production of technical reports and documents		✓
Undertake design calculations – stress, seismic, FEA		✓
AutoCAD user		✓
3D CAD user	✓	
Risk assessment techniques		✓
Resource management and planning		✓
Effective presentation skills		✓



Other	Essential	Desirable
Self-motivated	✓	
Ability to work to tight deadlines and under pressure	✓	
Full driving licence	✓	
British National and SC clearance (or ability to acquire)	✓	
Able to work away from home for short periods	✓	
To work in accordance with NIS policies	✓	

