

# JOB DESCRIPTION

## JOB TITLE: ENGINEER (PYROTECHNICS/BALLISTICS)

# REPORTING TO: TECHNICAL DIRECTOR

## **ROLE OF DEPARTMENT:**

- To research, design/develop and test new products and the continual development of existing
  products in line with customer requirements
- Develop the manufacturing guidelines, technical literature and costing data for project/product
- The generation of technical/performance data and support of PTL's product range
- Support the product categories from concept to in-service operation
- To ensure smooth transition of projects from development into the Production environment
- To ensure the business/sales department has technical/product support

## MAIN PURPOSE OF JOB:

- **Product development:** Design, develop and qualify existing/new products in-line with the commercial expectations of the business and business strategy
- Cradle to grave: Ownership of the project from concept to in-service operation, including NPI (New Product Introduction) and support of the product throughout the product life cycle (support to all entities relating to the project and product category)
- **Product support:** To support the designated product category with both Technical expertise (cross functional, including sales) and document creation
- Support: To support all key areas of the business from Production to the Sales department
- **Policy/process:** To ensure projects and procedures comply with the PTL Design manual/process and ISO 9001
- Expertise: Develop Technical expertise and "know-how" within the selected product category

## PRIMARY DUTIES AND RESPONSIBILITIES:

- To support the Technical Director with project work, design, problem solving and project management
- Design and test pyrotechnic chemical compositions , which provide the desired affects and are safe for manufacture and use within the end the product, ensuring designs and processes comply with safety regulations ER2014.
- To ensure projects comply to the current design manual/process
- To support the engineering and R&D function (engineers and Technicians) to help ensure commitments and deadlines are achieved with status reports to the Technical Director
- Undertake problem solving (cross functional) using statistical analysis, graphs and problem solving tools (DFMEA/PFMEA)
- To support process improvements (risk reduction, process time assessments and process improvements)
- Construction, implementation and control of project planning as required/deemed necessary
- Design and develop product and the product category in-line with the project requirements in the DDP and business strategy respectively
- Ensure budgetary control and ownership of the apportioned finance for the allocation project is

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- Ensure the methods of building new products are documented and transferred to document control to construct/amend work order, working instructions and drawings
- To assist in the development of tooling/equipment for new and existing products
- Aid the construction of Technical literature for the product category, literature will include (but not be restricted to the following): Technical specifications, Technical reports, data sheets, qualification test plan QTP, qualification test plan QTR, PDS, NPI requirements index
- To control and build small batch quantities and or prototypes for customer/end user trials
- To construct draft costing data for product and project costs
- To write procedures and undertake testing to qualify product for storage life, compound analysis and transportation requirements
- To support the existing product portfolio
- To carry out activities in accordance with ISO 9001/18001 quality system

# SECONDARY DUTIES AND RESPONSIBILITIES:

- To make recommendations for improvements to capabilities through investment opportunities
- Construct/ensure PTL's design intent does not infringe existing patents
- Compile evidence and literature for patent application/search
- To support supplier assessments and reported quality concerns as deemed necessary
- To undertake any other duties, with the department, which are requested by your Manager to aid the performance of the company. These duties will not be of any greater or more complex nature or level of responsibility than those of the post holder, except with the appropriate mutual agreement and necessary training
- To carry out duties in a manner that complies with the HSWA legislation, that is to work safely and with due regard for any other person who may be affected by their work activities.
- Ensure designs can be controlled and recorded to military standards.
- To carry out duties in a manner that complies with the environmental procedures (ISO 14001) with due regard to waste management and pollution control

## WORK RELATIONS:

- Internal: Management
  - Company employees
- **External:** To provide support to outside bodies as an when required, eg- customers, test centres and quality assurance bodies.





### KNOWLEDGE AND SKILLS:

#### Experience/Qualification

Experience within an explosive handling environment. General and specific knowledge of a technical environment and aligned product category. Experience working as a team member or working as an individual. Qualifications, minimum HNC-degree level qualifications in Engineering/Science with at least 5 years industry experience.

#### • Technical Skills

Experience of an explosive /small munitions environment. General knowledge of ammunition and the methods of creation and potential results. Experience in product development, project creation and project management

### Personal Skills

Initiative, flexibility, confident, good communication skills, attention to detail, ability to keep and product records, ability to work under pressure and multi task