

## Job Description

Job Title	Gear Product Engineer	Location	Manufacturing Office
Department	Manufacturing Engineering	Immediate Supervisor	Irwin Norris – Eng Plant Mng

### Position Summary

The position is in the Manufacturing Engineering department and handles tasks related to product design/development and subsequent product validation and warranty analysis. Candidate must have practical knowledge of **GEAR** engineering principles and techniques as used in the design of gears. The candidate must have knowledge of tools and techniques used to create technical drawings, plans and models. Knowledge of raw materials, production processes and quality controls to assure efficient/effective manufacture/distribution of products is also required. In addition, the candidate must possess critical thinking, complex problem solving and inductive reasoning skills.

### Primary Responsibilities

- Develop technical drawings, blueprints and schematics for gears, MUST understand gear geometry & mating
- Design manufacturing routing for production of gear from raw material
- Reverse engineer original equipment gears to enhance design / performance
- Define gear data and performance requirements to assure conformance to engineering design & function
- Develop and test alternate designs/processing methods for effect on operating conditions, sustainability and potential new system applications
- Analyze Customer/Supplier product design/redesign proposals to determine feasibility, cost and performance improvements
- Recommend methods for improving utilization of material and equipment
- Design test control tools and procedures for use
- Communicate requirements for product, quality control, packaging / handling and logistics
- Maximize gear reliability by implementing quality procedures/objectives that assure resolution of production issues and maximization of reliability while maintaining/reducing cost
- Monitor product performance after sale by analyzing customer feedback and warranty claims; perform root cause analysis and initiate design change as necessary to assure compliance
- Communicate with management, peers and users (supplier / customer)

### Experience & Knowledge Requirements

Education: Bachelor of Science in Mechanical Engineering  
Work Experience: 2–4 years gear engineering experience  
Required Language: Written / Verbal English  
Required Skills: Microsoft Office, SolidWorks (3D), SolidWorks FEA, Adobe Suite  
Preferred Skills: CNC Gear Hobbing, Shaping, Shaving, Grinding, CMM, Surface Finish Measurement Tool, Sensor Analysis Tools, Heat Treat processes.  
Physical: Ability to lift up to 50 lbs., Stand for long periods

### Limitations and Disclaimer

The above statements are intended to describe the general nature and level of work that will be performed for the described job. They are not to be construed as a complete list of responsibilities, duties, and skills required for the position. Position requirements represent the minimum level of education, work experience, skills and/or abilities required to perform the duties of the position.