

# Manufacturing Engineer

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Reporting to the Production Manager, the position is responsible for Manufacturing Engineering and CNC Programming for Canadian Babbitt Bearings Ltd.

## Principle Responsibilities and Accountabilities

The Manufacturing Engineer is required develop and prove manufacturing processes and associated CNC programs in line with production demands and product development requirements. The objective is to participate in and contribute to building cost effective and repeatable quality standardized manufacturing approach to the company's manufacturing processes. This includes developing 3D Models, 2D Drawings, Parametric Fixture & Tool Design, Manufacturing Instructions, Shop Application and Prove Out. It also includes contributing and improving the internal processes of the company

- Manufacturing Engineering
  - Development of standardized cost effective manufacturing processes and costs
  - Proving out of developed processes
  - Feature based manufacturing
  - Technical interpretation and manufacturing process development to lead time and cost parameters
  - Quality process integration
  - Development and production of standardized work instructions including Set Up
  - Tool & Fixture Selection, Design & Supply
  - Process trouble shooting and technical support
  - Engineering document & CNC program management and revision control.
  - Integration with product development
  - Engineering Change Control
- CNC Programming
  - Mastercam CNC Programming, post processing
  - Machine code prove out
  - Development of standard program macros
  - Feature based Programs and Parametrics
  - Production per production schedule – required CNC programs
  - Electronic Tool & Fixture Library
  - Program verification
  - CNC Program Revision Control System
- Preparation of project schedules timelines and costs
- Participate and contribute to continuous improvement, promote quality achievement and performance improvement throughout the organization.
- Effectively interact and participate with Sales, Technical Advisors, Production, Manufacturing Engineering & Quality personnel within the company and Russell Industries
- Maintaining awareness of the business context and company profitability, including budgetary control issues.
- Assessing the product specifications of the company, competitors and its suppliers, and comparing with customer requirements.
- Ability to review and analyze technical documentation

Ability to communicate and manage customers and suppliers both externally and internally is a key attribute

## Experience & Knowledge

Canadian Babbitt Bearings Ltd., manufactures and repairs different forms of critical bearings and associated industrial products used in the energy, marine and industrial sectors. Canadian Specialty Castings manufactures many different alloy castings at its Canadian Specialty Casting facility. Understanding and experience of design, quality and manufacturing with different materials, specifications, complex turning and five-axis machining, assembly and special processes is a significant asset.

Key attributes:

- Prior Manufacturing Engineering & CNC Programming, industry technical and or operational experience with a proven track record



- Experience with Mastercam, Solidworks and Vericut
- Understanding of Lean manufacturing practices
- Ability to communicate both verbally and electronically
- Manufacturing experience/knowledge of energy, industrial and marine and associated applications
  - Familiarity with process specifications and quality requirements
  - Familiarity with international and national standards and legislation
  - Experience in developing and designing manufacturing processes and product
  - Manufacturing close tolerance components
- Ability to write clear and concise technical and management reports
- Understanding of manufacturing scheduling, process and vendor management
- Understanding of performance criteria,
  - Monitor performance by gathering the relevant data and producing statistical reports
  - Collating and analyze performance data
- Ability to work in a team environment together with staff of different disciplines and driving the group to plan, formulate and agree comprehensive procedures and actions
- Ability to prepare clear explanatory documents
- MS Office with strong MS Excel skills
- Strong Engineering Drawing understanding and interpretation required
- Specific understanding of GD&T
- Understanding of and application of Health and Safety Protocols

### **Education/Certifications/Licenses**

- B.Sc. degree in mechanical engineering or associated discipline or equivalent experience

### **Physical Demands and Environment**

The physical requirements include exposure to both customer facilities, office and production environments that contains noise, dust and fumes. The physical effort of this position is moderate with some lifting, standing, bending, walking and carrying involved. Time is spent sitting at a desk, where fine finger movement is required to operate general office equipment and personal computers and in the Production Environment. The environment is fast paced and requires meeting deadlines within time constraints. Will work independently in an unstructured environment and understands, respects, and adheres to the workplace Health and Safety rules and regulations. Travel to customers or suppliers is required.