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## **Mechanical Engineer**

Omni Powertrain Technologies is a global provider of product solutions for modern powertrains of mechanical, hydraulic, or electrical designs. Our clients are leading OEMs of mobile equipment and industrial machinery. Our products find application in agriculture, construction, mining, commercial vehicles, and motorsports.

We assist our customers' product development efforts through our capacity to internally design, develop, and manufacture custom powertrain systems, or by supplying discrete components to their specifications.

In business since 1958, we are privately owned, customer oriented. We have manufacturing and assembly operations on three continents.

### Job description

- Support customer inquiries regarding customer (custom) applications, application of standard products and engineering assistance (including occasional travel to customer facilities, assisting in customer application design of motion control, participating in trade show booths and advertisement opportunities such as engineering white papers)
- Perform analysis and calculations to support the required performance and specifications of gearbox design projects and follow through with appropriate documentation.
- Size Gearboxes as per customer provided boundary conditions for specific applications and provide solutions accordingly.
- Incorporate gearbox system components into designs with regards to motors, shafting, bearings, seals, coatings, lubrication, material selection, hardware, etc.
- Incorporating design changes in current product lines as per FMEA Analysis and/or Application changes from the customer.
- Efficient Communication between Manufacturing plants located around the globe (America, Asia & Europe) to ensure smooth and meticulous completion of Customer orders and requirements.
- Design (and review designs for) gears, gear arrangements and gearboxes (utilizing the following gear types and arrangements: spur, helical, worm, bevel, planetary gearing, etc.).
- Design tools and/or machines of varying types (some of complex nature) for use in the testing of company products (along with verifying intended function and providing schematics and operational documentation).

### Requirements

- Self-initiating and able to work effectively with little direction and/or few guidelines.
- Able to communicate effectively both orally and in writing at all levels within the organization as well as with external customers and suppliers.

- BSME Degree (4–5 years experience) or M.S.M.E. degree or a M.S. degree (1 year experience) with a concentration of coursework in Machine Design, Product Design or engineering applicable to Powertrain Solutions.
- SolidWorks experience is essential.
- Knowledge and experience building mechanical and electro-mechanical machinery for testing and automation is essential.
- Knowledge and experience concerning design and use of gears, gearing arrangements, gearbox (system) design, mechanical principles and general gear manufacturing practices is desirable
- Experience using gear design software such as KissSoft, TKSolver, GearTrax or similar  
Strong drafting skills using solid modeling software programs.
- Knowledge concerning modern fabrication, assembly techniques and machine-shop practices and techniques is desirable.
- Working knowledge of computer systems and office software. (MS Word, Excel, Outlook, etc.)