Engineering

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ENGINEERING

Continuous Improvement Through Collaboration

Our experienced team of engineers have a wide area of technical expertise that ensures customer satisfaction through collaboration that starts at the time of RFQ and continues past product delivery. Our engineering teams continual improvement methodology is focused on improving processes, tool life and product quality output to deliver our customers the most cost-effective solutions on time.

Key engineering highlights:

- A tenured staff of manufacturing and application engineers
- On staff materials engineer supporting in-house heat treat processes
- Extensive experience in the use of the latest cam software
- Utilize both AutoCAD and SolidWorks cad systems
- In-house tool/fixture design capabilities
- In-house tool room with dedicated toolmaker
- Use of integrated gear software to aid in the gear manufacturing process
- Production part approval process (PPAP) process embedded
- Advanced product quality planning (APQP) process embedded

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Types of Gears We Manufacture

When it comes to gear engineering, there are various types of gears that our team of experts can engineer:

Spur gears: Spur gears are one of the most common types of gears that we engineer. These gears have straight teeth that are parallel to the gear axis. They are widely used in various applications such as machinery, automotive transmissions, and industrial equipment.

Helical gears: Helical gears are another type of gear that we specialize in. These gears have angled teeth, which allows for a smoother and quieter operation compared to spur gears. Helical gears are commonly used in applications that require high power transmission, such as automotive transmissions and heavy equipment.

Planetary gears: Planetary gears, also known as epicyclic gears, are another type of gear that our team of engineers are proficient in engineering. These gears consist of a central gear called the sun gear, surrounded by multiple gears called planet gears, and an outer ring gear called the ring gear. Planetary gears offer high gear ratios and torque capacity, making them suitable for applications that require compact and high-efficiency power transmission, such as automotive transmissions, aerospace systems, and industrial machinery.

Bevel gears: Bevel gears are a type of gear that have teeth cut at an angle to the gear axis. These gears are used to transmit motion between intersecting shafts and are

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FAQS

Frequently Asked Questions

Q: What processes do you have in place to ensure gear quality and precision? Quality is of the utmost importance to us. Our manufacturing processes include rigorous gear inspection at multiple stages, utilizing the latest gear measurement equipment and software. We also have an in-house tool room with dedicated toolmakers to ensure the precision of our gear cutting tools.

Q: How do you approach the initial project design phase with customers? We believe collaboration is key to successful projects.Our engineering teams work closely with customers from the initial request for quote stage, providing creative solutions and incorporating their feedback to optimize both cost-effectiveness and manufacturability.

Q: What sets your gear engineering services apart in terms of quality and customer service? Our commitment to unsurpassed quality and customer satisfaction is what sets us apart. From the initial design phase to production and delivery, we work closely with our customers to ensure their gear engineering needs are met with precision, reliability, and responsive support. Our tenured staff of manufacturing and application engineers are dedicated to continuous improvement, always seeking ways to optimize processes and deliver the most cost-effective solutions.

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Have any questions?

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