



**ENGINEERING
RE-ENGINEERING
FAILURE ANALYSIS
SOLUTIONS**

- Mining Open Pit & Underground
- Mining Mobile Equipment
- Cement
- Marine
- Pulp & Paper
- Sugar
- Chemicals
- Power Generation
- Rail
- Metal
- Manufacturing
- Military / Defense

TEXAS GEARS[®]
ENGINEERING

**PERFORMANCE
ENGINEERING
SOLUTIONS**
A PROUD DIVISION OF
EURO GEAR INDUSTRIES

Worldwide Leader in Engineering Solutions

Texas Gears takes great pride in being globally renowned for its engineering and re-engineering services. As a value-added partner in the mechanical engineering sector, we continuously strive to offer quality solutions for the most demanding and intensive engineering projects in heavy-duty industries, such as Oil and Gas, Mining and Aggregate, and Marine. Texas Gears, along with its comprehensive and industry-leading capabilities and processes, is firmly committed to excellence, and strives to surpass expectations with every project undertaken.



**Manufacturing
and Service**

**United States
Canada**



**Service
Centers**

**United States
Canada
Ghana, West Africa**



**Sales
Centers**

**United States
Canada
Ghana
Guinea
Burkina Faso
Côte d'Ivoire**

Diverse End-Markets

We service diverse end-markets, including:

- Mining and Aggregate
- Oil and Gas
- Military
- Marine
- Hydroelectric
- Energy
- Agriculture

Our extensive experience throughout these industries enables us to understand and meet our clients' specific needs targeted efficiently and effectively.





Engineering and
Re-Engineering Solutions

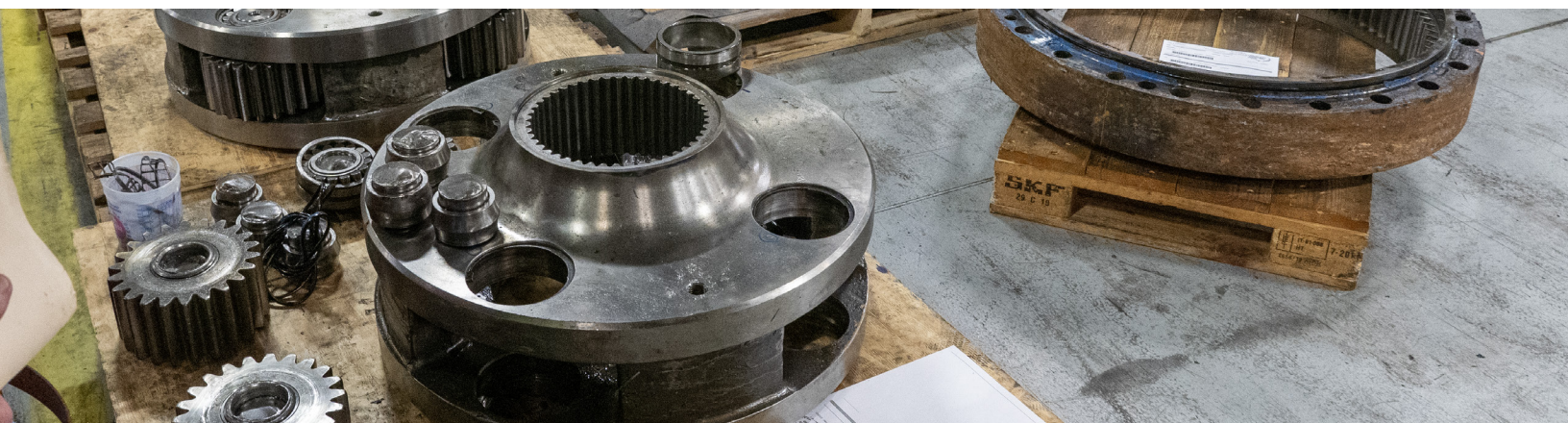
TEXAS GEARS

As the flagship in the engineering and re-engineering sectors, Texas Gears' mechanical engineering team is committed to finding quality solutions to the most demanding engineering problems and bottlenecks. Our seasoned engineers are committed to working with you from start to finish to find the solutions that best fit your needs and requirements. While combining advanced project management pinpoint techniques and strictly adhering to the highest quality management standards, we are dedicated in providing services that our clients expect and rely on.

When catastrophic mechanical problems occur, Texas Gears excels in its emergency response time. Anytime, anywhere. Texas Gears reports back critical details diligently to its clients from the beginning to the end of each project, with continuous updates and recent information, transparently, so all team members involved are equally informed. Our skilled engineers are able to design, re-design, 3D-model, and work around pre-established machinery to properly address the requirements of our clients.

Rapid Turnaround Rates:

Time is of the essence in each industry, and we recognize the importance of promptness in meeting our clients' urgent needs. While working hand-in-hand with our clients through each step of the process, we have streamlined our processes to maximize efficiency, without compromising on quality. Leveraging our state-of-the-art facilities and impressive fleet of seasoned engineers, skilled technicians, and cutting-edge machines, we rapidly produce cost-effective and robust solutions with successful long-term results. Whether it be prototyping, products, or aftermarket products, our agile approach allows us to offer quick turnaround times without compromising on the precision and reliability of our work, meeting all client time constraints. All our work is done in-house, under large roofs and shop floors, enabling Texas Gears to achieve its high rates of project turnaround. Additionally, our facilities are directly connected to rail, sea, and air transport, making logistics simple between our clients and us. Our logistical capabilities surpass most other companies, allowing us to achieve our renowned cost-effective and rapid turnaround rates.



Design from Square One

Our team of skilled engineers are trained and experienced in mechanical conceptual design and system modeling. Depending on the specific needs of our client, our engineers will account for the system requirements and constraints and deliver a solution that reflects the original purpose, meeting, and exceeding client expectations. For fabricated parts and components, our design team produces preliminary drafts and drawings that go through extensive re-iteration and optimization procedures. Throughout this process, stress analysis is conducted using analytical and computational methods, including the use of ANSYS/Workbench programs and MATLAB FEA techniques, ensuring that the final product will perform as intended. After concept design and design finalization, prototypes will be manufactured via 3D printing.

This ensures that the models generated will have the correct geometry and dimensional accuracy as desired in practical uses. Finally, after each step in our methodology is completed and quality assured, manufacturing of the final product commences. All throughout the design process, detailed notes, observations, and comments are recorded and tracked, assuring all standards and quality assurances have been thoroughly met. Texas Gears' diligent work and expert staff leave our clients confident and assured that their project will exceed expectations.



Custom Re-Engineering Solutions and Root Cause Failure Analysis

Texas Gears is the pioneer and leader in re-engineering solutions for OEM parts and equipment. Texas Gears' focus is to remove the OEM's design flaws to provide a higher ROI in our clients' parts and assets by increasing the reliability FOR longevity. The results of our re-engineering know-how provides custom parts and custom equipment specific for our clients' industries as compared to the OEM's generic parts, which are sold to numerous unrelated industries. Texas Gears knows that each industry is specific, which is why each part and equipment also needs to be specific to meet and exceed the needs of our clients!

Our engineering department also specializes in root cause and failure analysis for failed parts and equipment. Our data collection is compiled into an informative report explaining the reason for failure along with solutions Texas Gears can implement to increase the reliability and longevity!



VERTICAL BORING MILL CNC	Imperial	Metric
Max. Diameter (D)	346 in.	8,788 mm
Max. Height (H)	181 in.	4,597 mm
Max. Weight (W)	80 tons	80 tons
Milling Machine Head	Yes	Yes

9-AXIS HORIZONTAL BORING MILL CNC	Imperial	Metric
Max. Length (L)	432 in.	10,973 mm
Max. Height (H)	136 in.	3,454 mm
Max. Weight (W)	60 tons	60 tons
9-Axis	Yes	Yes
Rotary Table	Yes	Yes

4-AXIS HORIZONTAL BORING MILL CNC	Imperial	Metric
Max. Length (L)	150 in.	3,810 mm
Max. Height (H)	89 in.	2,260 mm
4-axis	Yes	Yes

PLATE ROLLING	Imperial	Metric
Max. Thickness (T)	3 in.	76 mm
Max. Width (B)	120 in.	3,048 mm

FURNACE	Imperial	Metric
Max. Length (L)	480 in.	12,192 mm
Max. Height (H)	192 in.	4,876 mm
Max. Weight (W)	100 tons	100 tons
Max. Temperature	1,650 °F	900 °C

BRAKE PRESS (1000 TONS)	Imperial	Metric
Max. Thickness (T)	3 in.	76 mm
Max. Width (B)	240 in.	6,096 mm

For a more in-depth survey of our fabrication and manufacturing capabilities, please consult our fabrication and machining brochure.

Comprehensive Manufacturing Capabilities and Services

Texas Gears stands at the pinnacle of engineering and manufacturing. Our manufacturing capabilities stand as a testament to our firm commitment to precision and innovation. We continuously strive to answer the industries' most challenging manufacturing problems while surpassing industry benchmarks and standard expectations. Here is a quick list of some of our impressive capabilities.

- Gear manufacturing ($\phi 1/4'' - 300''$)
- Certified gearbox assembly
- Machining and turning up to 80 tons
- Assemblies up to 200 tons
- Load and No-load testing
- Vibration Analysis, Spectro Analysis, Scada analysis
- Large mechanical and Civil fabrication of equipment and structural designs
- Certified Lead removal and disposal
- CMM digitizing



Texas Gears Restore™ Program

One of Texas Gears' crowning programs is its EGIRestore™ Program. This program assures that our clients can send in their broken gearboxes and power transmission equipment, and Texas Gears will refurbish every component and provide new internals for the unit. Each of these internals are thoroughly measured and specifically calibrated to ensure component reliability and performance for longevity. Texas Gears has a stock of common components available on hand, reducing critical downtime for both us and our clients, thus getting your vital equipment back up and running faster and more efficiently than OEM and competition. All refurbished components undergo NDT to ensure proper conformance, and the unit will be run-tested. During the run-testing, vital information, such as temperature, vibration, visual inspections, and noise measurements will be recorded and analyzed to fully certify that the unit passed all quality assurance checkpoints before completion. Our EGIRestore™ Program is the choice solution for our clients following recommended preventative maintenance measures requiring the utmost reliability and certifications for their units.



Texas Gears CEP Solutions

Clients worldwide have come to rely heavily on Texas Gears' CEP™ program to minimize their industrial downtime and unnecessary expenses. Our CEP™ program (a.k.a. Consignment Exchange Program) serves as a vital lifeline for clients experiencing repeated work for their gearboxes and power transmission equipment. For gearboxes and power transmission components that need to be continuously changed out for preventative maintenance and management, Texas Gears keeps several of those gearboxes in stock, so that clients can swiftly change out their gearboxes with ease. Clients send in their used gearboxes to us, and we ship out that gearbox from our stock back to them simultaneously, using our extensive arsenal of global logistics solutions, so they can install a fully refurbished gearbox meeting all required AGMA and ISO standards back in their production line. Texas Gears then, with our EGIRestore™ Program, fully refurbishes the gearbox that was sent in to us and keeps it in a climate-controlled stockroom until the client needs a new gearbox once more. This system allows for quick interchanges with reduced plant downtime and increased ROI to ensure consistent reliability for their operations. Clients from various industries have come to trust in our CEP™ program for their operations' efficiency and reduced costs and downtimes. They have come to rely on Texas Gears' EGIRestore™ and CEP™ programs and expertise to stay ahead of competition and industry, ultimately increasing plant productivity, efficiency, and profitability.

Why Choose Texas Gears?

Texas Gears is a globally renowned and trusted value-added partner, providing industry-leading fabrication capabilities with a steadfast commitment to excellence. Our comprehensive range of services, backed by our expertise and state-of-the-art facilities, ensures that we deliver robust, cost-effective solutions tailored to your unique requirements. With a focus on quality, reliability, promptness, and customer satisfaction, Texas Gears is the ideal choice for your fabrication needs.





Experience the Difference

When it comes to engineering solutions that seamlessly blend cost-effective and quality workmanship with rapid turnaround rates, Texas Gears stands as the flagship in any industry. With a proven track record of excellence and a firm commitment to client success, we are poised to be your trusted partner in all your engineering endeavors.

Contact us today to leverage our industry-leading capabilities and experience the extensive benefits of partnering with Texas Gears.



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