





Transmission Technologies Corporation (TTC) manufactures and markets TREMEC and Spicer brand transmissions for a wide variety of vehicles, from high-performance passenger cars and light-duty trucks, to medium-duty and class 8 commercial trucks.

Our commitment to quality is exemplified by our state-of-the-art QS & ISO-9000 certified manufacturing facilities. TTC operates two dedicated transmission-manufacturing facilities, which are located in the historic state of Querétaro, México. Centrally located in Knoxville, Tennessee, our U.S. based manufacturing operation produces shift assemblies and clutch-release components. The Knoxville facility also performs all packaging and distribution of service products as well as sequencing transmissions for just-in-time shipments.



LEADERSHIP IN A DYNAMIC INDUSTRY

TTC's Vision is quite clear **"To Be a Global Leader in the Design, Development, and Manufacture of Assemblies and Components for Mechanical Transmissions and Their Automated Derivatives."** Our cross-functional teams utilize CAD, CAM, CAE, and CIM techniques to deliver the highest-quality, most technically advanced transmissions in the industry.

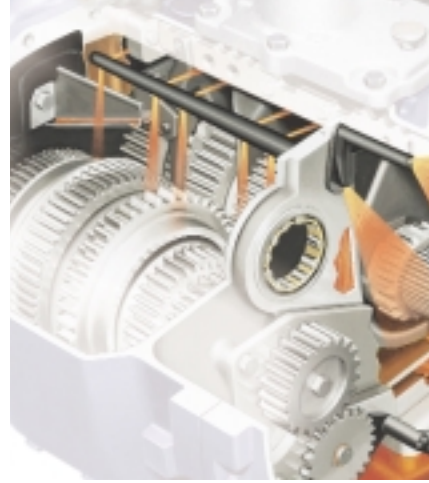
TTC's operating philosophy has led to numerous awards, including: Ford Q1, GM Supplier-of-the-Year, and the prestigious Shingo Prize for Excellence in Manufacturing and many others.



Our customers include virtually every major OEM from class 1 through 8—GM, Ford, Navistar, DaimlerChrysler, Daewoo, Nissan, Isuzu, Aston Martin, Freightliner, Kenworth, Mack, and many more.



■ Patented Optilube™



SPICER®

For more than 70 years, Spicer medium- and heavy-duty transmissions have led the industry with new innovative designs, including Optilube™ Spicer Lite™ and Automate-2™ TTC is committed to continue this rich tradition, providing superior value to our customers.

With our recent introduction of a new fully **A**utomated **M**echanical **T**ransmission (AMT), we have taken transmission technology to a new level. Targeted for the medium-duty market, the AMT eliminates the clutch pedal and the need to manually shift gears. Its unique launch assist feature prevents roll-back on inclines. This all adds up to reduced operating costs and improved driver satisfaction.

In the heavy-duty market, TTC is paving the way for a new generation of transmissions with Spicer Lite II™, the lightest 10-speed on the market. Finite element analysis and stress modeling allow us to reduce weight, while strengthening the design.





TREMEC

High-performance enthusiasts have used bulletproof TREMEC transmissions for over 35 years. Today, our TREMEC transmissions are installed as standard equipment in virtually every sports car in North America and can also be found in a variety of light-duty trucks and sport utility vehicles around the world.

TTC's use of cellular-manufacturing processes provides greater flexibility, which allows us to make quick changeovers. After each changeover we verify dimensional accuracy to ensure proper machine set-ups. Using advanced SPC techniques, we continue to monitor all key part characteristics (KPC's) ensuring that our processes remain in control. As part of our QS9000 control plans, every transmission is subjected to a functional test to verify proper assembly and is also tested for noise, vibration, and harshness (NVH) prior to shipment.

This improves first time acceptance by the end user, as well as confirming assembly and manufacturing integrity.

One of our most intensive testing areas is the Bob Bondurant School of High Performance Driving. Our TREMEC transmissions are used exclusively in the Bondurant race prepared Ford Mustangs. The school provides an excellent test-bed for our transmissions. The knowledge we gain here is used to enhance current and future transmission designs.



MANUFACTURING INNOVATION

With more than 2,000 metric tons of forging capacity, our vertically integrated facilities are acclaimed for outstanding quality and quick die change performance. We use state-of-the-art manufacturing processes such as dry hobbing of gear teeth to assure quiet, durable, and consistent quality transmissions.

Our heat-treating process has become a worldwide benchmark for one of the largest U.S. automotive manufacturers. The secret to our success is the ability to continuously monitor and control each furnace from master control centers.

At TTC, total quality is more than a philosophy; it's our corporate culture. Every employee is responsible for the quality of the end product, and every member of the team strives for continuous improvement.



■ Shingo Prize for
Excellence in
Manufacturing





RESEARCH AND DEVELOPMENT



At TTC, our future is dependent upon our ability to design, develop, and manufacture new innovative products. Our dedicated engineering teams are highly focused, incorporating electronics into our transmissions, creating a new family of Automated Mechanical Transmissions. Other teams are working on next generation continuously variable transmissions (CVT's).

Our test facilities are equipped with electric, gas, and diesel dynamometers, shift test stands, a test fleet with more than 40 vehicles, and a complete metallurgical laboratory. To monitor and improve NVH, we use various types of equipment such as our chassis dyno, our two semi-anechoic chambers, accelerometers, and other noise frequency analysis tools. We utilize the latest software modeling programs for stress analysis to optimize each transmission design.

Capital investment in new state-of-the-art equipment is further supported by investing in our most important asset, "people." At TTC, each employee receives an average of 80 hours of training per year. All of these resources are geared to provide our customers with the highest-quality, most technically advanced transmissions in the industry.



14700 Helm Court
Plymouth, MI 48170
(800) 401-9866 or (734) 456-3770
Fax: (734) 456-3739
www.ttcautomotive.com

