



Transtech trusts Transoft Solutions

Making inspections and research easier in the freight transport sector

It was a problem that plagued Transtech Ivesur Brasil Ltda for the better part of a decade – getting the right data to support commercial inspection services, research, and investigative analysis for its many customers.

But sometimes, the solution to your greatest challenges is right at your fingertips. All it took was some Internet research to find Transoft Solutions and its AutoTURN software.

“AutoTURN is now a fundamental tool for us,” says Rubem Penteado de Melo, Technical Director, Transtech.

Who is Transtech?

Founded in 1992, Transtech's primary customers include trailer manufacturers and general cargo conveyors in the freight and hazardous products transportation sector. These are businesses that need to get their vehicle models accredited by regulatory agencies around the world. Transtech also supports safety investigations following traffic accidents. In these cases, Transtech recreates the maneuvers performed by vehicles, analyzes the road geometries, speed, steering angles, lateral acceleration, and critical factors such as the Static Rollover Threshold, which measures the vehicle's resistance to roll over as it turns a corner.

Over the last decade, Transtech has conducted more than 1 million commercial inspections. These inspections – which include assessment of the swept path and turning

capabilities – are administered on 500 unique vehicle models from companies across Asia, South America, North America, and Europe.

Transtech also provides expertise to road transport class associations, which set the technical standards for all phases of highway system development. Roads are often built based on the kinds of trucks needed for the industry in the area.

As a result, Transtech's knowledge of the tipping risks with cargo trucks has proven invaluable to the people who design and maneuver highways.

Consider the complexities involved with heavy haulers. Some have as many as 11 axels and carry 91 tons of cargo. The rate of acceleration, the sharpness of the turn, and the available roadway all need to be carefully calculated.

It's a science, and nobody does it better than Transtech.

Transtech professionals use their expertise to ensure vehicles in the freight transport sector and the highways they travel are engineered safely.

Why AutoTURN?

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transportation engineering software. Transoft's flagship product is AutoTURN.

AutoTURN simulates the path of vehicles in various situations, allowing inspectors to easily see if they can safely maneuver through challenging turns, and in compliance with transportation safety regulations.

"Our previous method to review vehicle movements was not productive," says Mr. de Melo. "Some of the vehicles we inspect are far more difficult than others because of their complexity. And, of course, this can lead to errors at times."

Those types of mistakes are preventable.

With AutoTURN, Transtech team members can draw complex load shapes in their CAD environment and assign it to any part of the vehicle they are inspecting. The software also allows Transtech to evaluate the envelopes generated by the oversized loads. This valuable data helps validate that vehicles can adhere to safety regulations such as the Certificate of Adequacy to Traffic Legislation.

AutoTURN's ability to support more than 25 non-standard oversized overweight vehicle configurations is critical. It enables Transtech to generate the turning simulations it requires for its research, accident investigations, and commercial inspection services.

In addition, Transoft offers an extensive library of more than 800 manufacturer-based vehicle templates. This library is regularly updated so customers always have the latest information.

"Safety is a key consideration for us," says Mr. de Melo. "One of the biggest advantages of AutoTURN is that it allows us to study new and unique vehicle and transportation conditions with greater productivity, precision, and quality."

Transtech has some advice for companies considering AutoTURN: take time to experiment with the software's potential in increasing productivity and quality. "That is what justified our investment in it," says Mr. de Melo. "From the vehicle template library to their quick answers to any issues, our experience with Transoft and AutoTURN has been nothing short of excellent."

As for future uses of AutoTURN, Transtech has already added various models of road sets to the library including some agricultural models, making them a specialist in that area as well.

"It allows us to archive vehicle models and it's also easy to use," says Mr. de Melo.

Safer and more efficient

From the early days of AutoTURN, accurate and reliable results and engineering controls have always been in place to give road engineers confidence that their designs were safe.

If the software helps companies like Transtech support their clients so they can operate more safely and efficiently, it has done its job.



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