

Goodyear adapts AMT system to commercial tires

Last August, Goodyear Tire & Rubber Co. gave props to its new Air Maintenance Technology (AMT) system, saying it could lead to tires that maintain tire pressure without the need for any external pumps, electronics or driver intervention.

To read all about how it applies to consumer tires, check out these links:

“Tires auto-inflate with new Goodyear technology” and

“Goodyear tire technology is promising.”

At the 2012 Internationale Automobil-Ausstellung, also known as the IAA Commercial Vehicle Show, in Hanover, Germany, the company debuted the AMT system for commercial truck applications.

“We believe the Air Maintenance Technology application for commercial vehicle tires will not only enhance the performance of the tire, but will also provide cost savings to fleet owners and operators through the extension of tire tread life and increased fuel economy,” says Jean-Claude Kihn, chief technical officer.

Tire-related costs are the single largest maintenance item for commercial vehicle fleet operators, with more than 50% of all truck and trailer breakdowns involving a tire in some way, said the American Trucking Association in a 2008 article in “Heavy Duty Trucking.”

Goodyear’s Air Maintenance Technology mechanism is designed to allow tires to maintain constant, optimum pressure. The company says it expects AMT to play “a major role in optimizing tread life in the commercial tire market.”

Commercial trucks pose a different challenge for AMT than that of consumer vehicles because the tires are larger, have higher inflation pressures, drive longer distances and carry much heavier loads. Commercial tires operate at a higher air pressure, typically 105 psi for commercial tires versus 32 psi for consumer tires.

As such, they demand a much more challenging performance requirement for the AMT’s pump system. (The commercial truck AMT system also is being designed to perform after the retreading process.)

Prototype tires have been produced in Goodyear’s Topeka, Kan., manufacturing plant. Goodyear says rigorous validation testing has confirmed that the AMT pumping mechanism works. An extensive fleet trial is planned to gather real-world information from customers in 2013.

A \$1.5 million grant from the United States Department of Energy’s Office of Vehicle Technology is helping speed up research, development and demonstration of the AMT system for commercial vehicle tires. A grant from the Luxembourg government for research and development will continue to help fund Goodyear’s efforts in researching and developing the AMT system for consumer tires.

For other news from the International Motor Show in Hanover, click on this link:

“Continental combines retreading and recycling.”