Myths and Truths about Retreading



developed in partnership with

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t's time for another round of debunking myths about today's modern, safe, reliable retreads. These tired retread myths are rooted in outdated information still circulating from decades ago when truckers attributed all road gators to retreads. Some of these same old-school truckers also checked their tire pressure with a tire thumper. In addition, the truck tire retread industry has been impacted by a surge of ultra-low-cost imports that are 65% less likely to be retreaded, are worse for the environment and add to the misconceptions about retreads.

Fortunately, these misconceptions are changing, and most major truck fleets and business savvy owneroperators are on board with retreads. In fact, the trucking The trucking industry saves more than **\$3** BILLION each year by retreading.

industry saves more than \$3 billion each year by retreading, and fleets spend 50% or less on retreads, extending the life of their investment. David Stevens, managing director of the Tire Retread & Repair Information Bureau, says the thinking behind the way fleets manage and treat their tires has changed. "Smart

Fleets **SPEND 50% OR LESS** on retreads. fleet owners and owneroperators view their tires as an investment, not an expense," he says. "Instead of buying and then discarding the cheapest low-quality imported tire after a disappointing

number of miles, fleets that view tires as an investment will buy a high-quality new tire that comes with a multiple retread guarantee. Then those fleets carefully manage that investment by ensuring it's properly inflated, maintained and pulled at the right tread depth. This approach ensures useful second and third lives (or more) and significantly increases their return on their tire investment," Stevens says. Don't let lingering myths about retreads influence your maintenance budget. Here are seven truths behind the myths about retreads.



MYTH: Buying low-cost import tires will save more money than retreading premium tires.

TRUTH: Successful fleets that buy premium tires and have adopted retreads don't believe this myth.

Eighty-nine percent of fleets with 500 or more trucks use high-quality tires with multiple retreaded lives. These fleets carefully track their cost per mile and total cost of ownership, and they see that retreads are clear winners for them. Retreading a premium

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Retreading a premium tire **TV/O** times can deliver **500%** more miles per tire than an ultra-low-cost new tire.

tire two times can deliver 500% more miles per tire than an ultra-low-cost new tire. The cost of each retreaded tire compared to a premium new tire is generally 50% less.

While the introduction of the low-cost imported tires gives smaller fleets a low-barrier entry to the market, they may overlook the true ROI of investing in a premium tire and managing the retreading program that reduces long-term cost. These potentially inferior products are made possible by a lack of standardized testing and data about tire wear performance and rolling resistance. This short-term solution chosen by cash-strapped small fleets and owner-operators negates long-term ROI they would have seen with premium tires.

Steve Erwin is the transportation manager for Cicero, New York-based Clinton Ditch Cooperative Co., an independent beverage bottle distributor that operates 41 power units, 150 trailers and 30 dollies. He says that switching to the Michelin

The cost of each retreaded tire compared to a premium new tires is about **50%** less. Retread Technologies process had a profound impact on their recapping process. "We have had little to no failures and our tire budget has stayed flat, versus the other increasing costs in the operation," he says.



MYTH: All the rubber on the side of the highway comes from retreads. **TRUTH:** New and retreaded tires fail at the same rate.

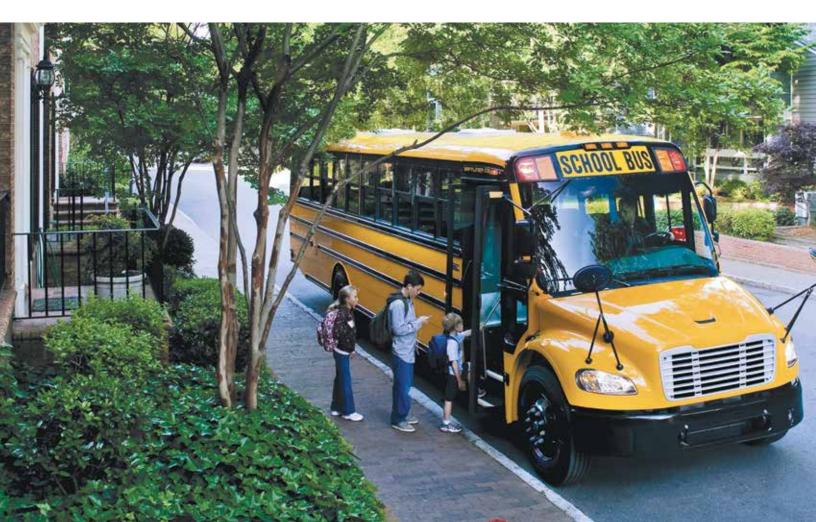
According to a study by the National Highway Traffic Safety Administration, which involved collection 85,000 pounds of scrap commercial tires and 300 tire casings from highways, tires fail because they hit other debris, they are not properly maintained, or they are under- or overinflated. The rubber pieces you see on the road come from both new and retreaded tires in equal proportions to their usage on roads. Multiple federal and state studies have also proven that most of the rubber on the road comes from truck tire failures due to underinflation, overloading and tire abuse.

> Visible metallic products attached to the tread band are evidence that this was not a retread failure.

MYTH: Retreads are not safe and can cause accidents. *TRUTH:* Retreaded tires are so safe that on any given day, 80% of commercial aircraft are landing on retreaded tires.

In fact, the safety of retreaded tires has been the subject of at least six studies over the past two decades, including those conducted by the U.S. Department of Transportation. Every single study concluded that retreaded tires are as safe as new tires. Statistics compiled by the U.S. DOT show that nearly all tires involved in any tire related accidents are underinflated or bald. Properly maintained tires, whether new or retreaded, do not cause accidents. "Emergency vehicles and school buses, which carry the most precious cargo in the world, operate safely on retreaded tires. They are used with the same reliability and performance as new tires on emergency vehicles, emergency vehicles, trucking fleets, commercial aircraft and timesensitive operations like UPS, FedEx and the USPS, all while cutting costs significantly," says David Stevens of TRIB.

Read the extensive safety studies at www.retread.org/government-studies



MYTH: Retreads are less fuel efficient than new tires.

TRUTH: If fuel efficiency is important to your fleet, then retreaded tires can provide the solution you need.

Many manufacturers offer the same low-rolling resistance tread designs on their new and retreaded tires while independent retreaders can also offer several low-rolling resistance options. "There are over 40 retreaded tire options that have been SmartWay[®] approved by the EPA as low-rolling resistance tires," Stevens says.

Glenn Stockstill, product category manager for Michelin Tire retreads, says many of their retreads are EPA SmartWay[®] approved and can deliver 80% of the mileage of their new tires for maximum fuel efficiency. "There are over 40 retreaded tire options that have been SmartWay[®] approved by the EPA as low-rolling resistance tires."

> - DAVID STEVENS, MANAGING DIRECTOR OF THE TIRE RETREAD & REPAIR INFORMATION BUREAU



MYTH: Retreads don't do well in extreme temperatures.

TRUTH: Improper maintenance and tire inflation lead to failure, especially in extreme temperatures.

One of the large retread studies was conducted in Arizona, where heat is an issue. At the end of the study, they found that poor tire maintenance

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— particularly running underinflated tires — and tires with punctures due to road hazards were the most frequent causes of failure in tires of all types.



HOW CAN YOU TELL IF A ROAD GATOR IS A RETREAD OR AN ORIGINAL TIRE?

Tire field engineers often conduct "tire forensics" to determine what caused a tire to fail. If you know how to "listen," the tire (or what's left of it) will tell the story. For example, retreaded tires offer some tell-tale signs: If the tire is still largely intact, you can look for the retread DOT code branded on the sidewall near the original tire DOT code. Also, with a retread, there may be cushion gum bonded to the tread base. Another indication is a seam where the tread is bonded to the tire. If there's no cushion gum or seam, there's a good chance it was not a retread. Regardless if it was a retread or new tire, the likely reason for the tire failure is improper maintenance.

– TY COBB, MICHELIN FIELD ENGINEERING COMPETENCY MANAGER **MYTH:** They don't look as cool as new tires. **TRUTH:** This may once have been true, but today's innovative retread processes and options for custom painting make it hard to differentiate new tires from retreaded ones.

Stevens says he has the receipts for busting this myth.

During its annual Spot the Retreads contest at the March 2019 Mid-America Trucking Show in Louisville, the Tire Retread & Repair Information Bureau asked booth visitors to identify which of the many tires on display were new and which were retreaded. More than 350 attendees attempted to correctly identify the tires, and as with previous years, only about 25% could correctly figure out which was which. "Even experienced truckers admitted that what they thought they knew about retreads was not necessarily true," he says.



Attendees try to guess if the tires they're viewing are new or retreads at the 2019 Mid-America Trucking Show in Louisville, Kentucky, in a contest hosted by the Tire Retread & Repair Information Bureau.



MYTH: Retreads are not as good for the environment.

TRUTH: Manufacturing a retreaded tire requires 15 gallons less oil and approximately 90-100 pounds less total material than a new tire.

The U.S. and Canada tire retread industry therefore saves approximately 217.5 million gallons of oil and delivers 1.4 billion pounds of landfill avoidance on an annual basis. A recently completed life cycle assessment reported by Ernst & Young compared a well-manufactured tire which could be retreaded to that of an ultra-low-cost import from Asia. The research found that in Europe the retreaded tire reduced carbon dioxide emissions by 24%, reduced air pollution by 21%, reduced natural resource extraction by 70%, reduced land use by 29%, and reduced water consumption by 19%.

Unfortunately, the use of disposable, cheap, imported tires creates environmental risks that are

stacking up. Many of them don't meet the EPA SmartWay[®] rolling resistance targets they claim to, and disposing of all of these ultra-low-cost, seldom retreaded tires means filling more landfills.

RETREADED TIRES 24% CO2 emissions **21%** air pollution **70%** natural resource extraction **29%** land use **19%** water consumption



REDUCE TIRE TOTAL COST OF OWNERSHIP

- A casing is 70% of the value in a new tire purchase
- A retread is 35% of the cost of a new tire
- A retread delivers 80% of the mileage of a new tire



- Retreading saves 100 million+ gallons of oil annually*
- Millions of tires that would end up in landfills yield thousands more miles*

*retread.org/learn-more





CONCLUSION

The overall quality of retreaded truck tires has increased dramatically in recent years with the introduction of advanced technology, including the use of computers in manufacturing and nondestructive tire testing. Retreaded tires have historically made up about 50% of the replacement commercial tire market in the U.S. Fleets know they can rely on retreaded tires to deliver safety, reliability and performance while significantly driving down costs. When choosing to retread a premium tire using the process of a major manufacturer, you can count on a retreaded tire that will outperform a lesser-brand new tire, and will even deliver mileage that's on par or better than a new, lesser-brand, cheap import.

Don't let the old myths keep you from choosing retreaded tires as a safe, effective, environmentfriendly, cost-effective addition to your fleet's tire management program. Share these myths and truths with your drivers to assure them of the safety and performance of retreads.

For more information about how retreads can impact your fleets bottom line, visit *bit.ly/michelinretreads*

