



COMMERCIAL FLEET TIRE DIGEST

*The authoritative guide to reducing commercial tire expenditures from
Pressure Systems International,
the manufacturer of the Meritor Tire Inflation System by PSI™*

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Are the New Wide Base Tires right for your trailers?

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Over the last several years, there has been a lot of excitement generated by the latest innovation in the tire industry: Replacing dual tires with only one tire.

There are (2) main advantages to replacing one tire with two.

-Weight savings can add up to as much as 1,300 pounds depending on whether you are replacing both the drive and trailer tires and whether you are using them with aluminum wheels in place of steel.

-Fuel economy is the other obvious advantage because of the reduced rolling resistance of only one tire and one wheel.

Other advantages include:

- Easier maintenance (no inside duals to worry about)
- Eliminate dual matching concerns
- Improved brake cooling
- Improved, softer ride because the tire is so wide the vehicle is not susceptible to the normal road rutting condition that occurs over time.

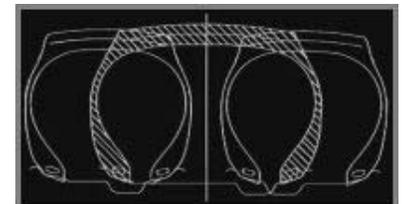
It is important to understand

that one 445/50R22.5 is NOT double two 11R22.5 tires. A conventional trailer tire size is 11R22.5 and the most common wide base tire size is 445/50R22.5. So using (2) 11R22.5 tires gives an overall tire footprint of 124 sq inches. Using one 445/50R22.5 has a footprint of 111 sq inches (10% less contact area). The wide base tire is doing more "work" than two duals, which results in the tire being more sensitive to running overloaded and under inflated. Heat will also become a big issue if the wide base tire is not properly inflated. Running even 10% under inflation will lead to premature tire removal because of irregular wear and tire durability issues. Most fleets that are running these wide base tires use an automatic tire inflation system because maintaining proper inflation of the 445/50R22.5 is so critical. Also, when running single tires, if you experience a puncture, there is NO limp home capability unless your trailer is equipped with a tire inflation system.

Fuel economy is a hot button

for most fleets today and using the new wide base tires will improve your fuel economy, but by how much? The answer is - "it depends". We have seen reported numbers from 1% to 4%, but there are many variables that can affect vehicle fuel economy. Drivers, roads, loads, vehicle make and model all contribute to this equation. Running a serious test in your fleet under your specific operating conditions is the only way to determine if the new wide base tire is right for your fleet.

For fleets that haul loads that gross out in weight, such as grain and produce, the additional weight savings of using wide base tires can increase payload and daily revenues. For these fleets, using wide base tires is likely a no-brainer.



Q & A PSI ANSWERS YOUR QUESTIONS

Q. How are mileages and retreadability of the new wide base trailer tires?

A. Since trailer tires are running on a free rolling position, removal mileages of the wide base tires are equivalent to dual tires. The jury is still out on retreadability. Since one single tire is not double two tires, the wide base tire is doing additional "work" which tends to generate additional heat. Running low inflation pressure will compound this issue. Keeping tires running cool is the best way to maximize retreadability.