

HOW LOGGING TIRE CHOICE IMPACTS BOTTOM LINE

Tires greatly impact performance in the forest, but not every setup is ideal for every forest setting. What might be a good solution for one logger, might not be for another.

Many loggers have a tendency to choose the lowest priced option available – but don’t realize the sacrifices they’re potentially making by doing so. If they choose an undersized tire or too low of a ply rating, they’re going to wear that tire out pretty quickly. Here’s what you need to know.

PLY RATINGS

Forestry equipment has grown heavier and higher-powered – 25-30% larger than a decade ago and equipped with up to 12-foot, 10,000-pound grapples.

Today, many loggers are using bigger machines to do the work of two smaller machines. Not only do the tires have to carry the weight of the bigger machine, but they have to endure twice the punishment.

THE PROBLEM:

- OEMs are still offering the same ply tires they were years ago on those smaller machines.
- The logger is expecting to get greater productivity, with a grapple on back and greater drag capabilities than what the tires can handle.

THE SOLUTION:

- Titan has adjusted by introducing the industry’s highest-ply tires:
 - Recommend the latest 30- and 32-ply tires in a 30.5L-32 or 35.5L-32 size for today’s heavier machines.
- Even though the heavier tires are a little more expensive, the cost is well-justified over time, because they last longer.

FLOTATION SINGLES VS. NARROW DUALS

Tire setup can be weather-dependent and location-specific. In order to increase flotation, you have to decrease the ground-bearing pressure. You do that by spreading the pressure out over a wider area. You have two options: flotation singles or narrow duals.

FLOTATION SINGLES

PROS	CONS
<ul style="list-style-type: none"> • If you’re in an area that requires flotation 100 percent of the time, you’d benefit from running flotation singles, because they’re easier to manage inflation pressures as compared to duals. • Some flotation tires on the market are roughly 10 inches wider than standard forestry tires. The wide footprint helps with flotation in wet or swampy forests. 	<ul style="list-style-type: none"> • You could be wearing out a more expensive tire more quickly – especially if it is not needed 100 percent of the time – as opposed to a dual configuration, which allows you to remove the outer tire and run the single when conditions don’t require it.

NARROW DUALS

PROS	CONS
<ul style="list-style-type: none"> • If you’re in an area that doesn’t require flotation 100 percent of the time, then duals may be a good option. • Allows flexibility to easily take the outer tire off and run the single when conditions don’t require it – that way you’re not putting wear on those extra two tires when it’s not necessary. 	<ul style="list-style-type: none"> • Because there are no shocks to absorb the impact of the machine, operator tendency may be to run at a lower inflation pressure for a softer ride. • It is difficult to access the pressure valve on the inner dual. • If inflation pressure is too low, there’s a higher probability of a tire problem down the road — especially when you’re not able to check that inside tire pressure on a regular basis on a dual setup.

ADDITIONAL CONSIDERATIONS

Ply ratings and tire size are not the only design factors that affect durability, however. Today's tire manufacturers are working to build stronger forestry tires through development of new technologies — both in steel-belt packages and rubber compounds. In the last ten years, steel-belt constructions have become the standard for forestry tires, because of their ability to protect from punctures. Another trend that directly affects tire durability is the increased use of tubeless tires in forestry.

STEEL BELTS

- Protect tires from punctures from branches and stumps
- Offers additional protection between lugs
- Industry has shifted from two-belt to four-belt constructions

RECOMMENDATION: Choose a tire manufacturer that offers four-belt constructions.

COMPOUNDING

- Running over sharp branches and stumps make rubber susceptible to chunking and tearing. Tire manufacturers are developing special rubber compounds to address this.

RECOMMENDATION: Choose a tire manufacturer that offers a forestry-specific compound.

TUBE VS. TUBELESS

While both types run at the same inflation pressures and load capacities, their major differences lie in cost and reparability.

TUBE

- Has been the industry standard
- Prevents tire from going flat when harsh conditions push beads off rim band
- Cheaper option
- Not as easy to repair

TUBELESS

- Becoming increasingly popular
- More expensive
- Easier to repair
- A must-have with dual setups because of constant debris between tires

MAINTENANCE

#1 cause of premature tire failure: *improper inflation.*

An underinflated tire can cause the sidewall to bulge and lead to stress cracks around the sidewall and lugs. It can also cause problems with slippage on the wheel. An overinflated tire will swell in the middle and won't flex when running over stumps, increasing the likelihood of impact damage.

To ensure tire longevity: *routinely inspect the tires between shifts to keep tires at the proper inflation pressures.*

It's important to seek the advice of your local dealer. Sometimes the cheapest tire or the tire that came installed on the OEM equipment is not always the best option for durability and performance in your neck of the woods.

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