

## "SIPED" TIRES HAVE BETTER TRACTION, WEAR LONGER

# You Should Have Your Tires Slashed

Slashed tires increase traction, cut wear and generally improve performance of nearly every kind of automotive and truck tire, according to a Midwestern company.

"Siping", as the company's slashing process is called, isn't new but it's only been used in a few regions of the country, particularly the Northwest. Where the machine has been in regular use, siping has become an almost standard option for both car and truck buyers.

The Saf-Tee Siper machine, marketed by Wes Sprunk, Missoula, Mont., and manufactured by Branick Manufacturing Co., Fargo, N. Dak., makes hundreds of thin slits — at a rate of 5 per inch — across the tread on any tire up to 24.5 in. Depending on how much tread is on the tire, the slits run anywhere from 5/32 to 11/32 in. deep.

The advantage of siping tires is that the slits, which run straight across the tread, make the tread more flexible, improving the tire's grip on the road. "You can feel the difference immediately, especially on icy roads," says Sprunk. "Siping gives inflexible tread patterns extra edges to grab with."

The second biggest benefit of siping is wear. The slits allow heat that builds up in tires to disperse, increasing tire mileage by as much as 20%, according to truck fleet operators who have been operating on siped tires for years, and several government testing reports.

"The Navy was having trouble with planes skidding on aircraft car-

rier flight decks," says Sprunk. "They began siping the tires of jets with our equipment and found the coefficient of friction improved by up to 60%."

Tests by the National Safety Council have shown that siped tires increase breakaway traction (from a standing start) by 64% and reduce stopping distance by 22%. On-the-go traction was improved 28%. Gas mileage is not affected. Sprunk has testimonials from truck fleet operations with hundreds of trucks that testify to the fact that tires wear 20% longer or more with siping. Some tire dealers, including Tom Sherry, Missoula, Mont., told FARM SHOW that a new tire rarely goes out of his store without being siped. Sherry did over \$50,000 worth of siping in his tire shop last year with just three machines.

Sprunk says that although officially the major tire companies do not endorse tire siping, they have never turned down a warranty claim on a siped tire. "One large dealer contacted all the major companies and was told that siping would not affect warranties," says Sprunk.

The Saf-Tee siping machine takes up about as much room as a tire balancing machine. It takes just 2 to 3 min. to sipe a tire. A small blade automatically runs back and forth across the tread, making the slits to the desired depth. You can cut to within 1/32 in. of the tread depth of the tire. If there's 6/32 in. of tread, for example, you can cut 5/32 in. deep. The machine will sipe tires from



Lines drawn by artist on photo of siped tire show "sipes" — at a rate of 5 per inch — along one row of tread.

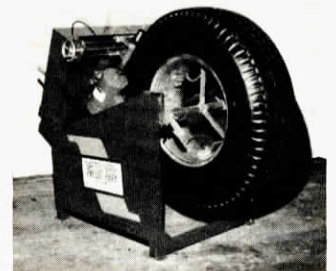
13-in. car tires to 24.5 in. truck tires. The cost is \$5 to \$10 per tire.

Sprunk says many sports car and motorcycle racing enthusiasts have known the value of siping for years, using sharp knives to sipe tires by hand before competition.

"Besides the increased traction and reduced wear, you get a smoother and quieter ride," adds Sprunk.

The Saf-Tee Siper sells for \$3,000 to \$4,000, depending on options. Sprunk bought the rights to the machine from its inventor in Mississippi, who sold about 1,000 machines over the last 10 years or so.

If you want to experiment with siping, and you don't want to do all four tires at once, you should do both drive tires. Sprunk says it's possible to sipe tires by hand with a razor blade or sharp knife if you're careful. However, FARM SHOW readers can get as many as four tires siped for free if they bring or ship them to the Branick Manufacturing plant in Fargo, N. Dak., where the tire siping



A small blade on the Saf-Tee Siper machine automatically runs back and forth across the tread.

machine is made. You can contact Sprunk for details, or for the name of a tire dealer in your area who sipes tires.

For more information, contact: FARM SHOW Followup, Wes Sprunk, Marcy Manufacturing Co., Ponderosa Center, 2704 Brooks, Box 4247, Missoula, Mont. 59806 (ph toll free 800 526-4061, or 406 728-6750).

## DRIVEN FROM FENDER SEAT

# Chopper Mounted On Turn-Around Tractor

By Dieter Krieg

Pennsylvania dairy farmer Gilbert Linde, of Union, has the only forage harvester of its kind in the entire world. It was designed and built by him two and a half years ago and has now been used successfully for two seasons.

Essentially, Gilbert's unusual machine is a self-propelled 2-row forage harvester. A Deutz 8006 provides power to the chopper assembly, which features a 3-point hitch and special gearbox for pto linkage. Aside from the tractor, Gilbert figures he has about \$3,000 in the unit. He built the machine because he saw it as a challenging and satisfying project. Also, it enables his family to have greater flexibility in harvesting. Up until two years ago, the family relied on custom operators to fill their silo.

The tractor is driven in reverse, and the chopper unit is directly behind the driver's seat, Gilbert has to pilot the unit from a seat on the fender. The clutch would be inaccessible there, so special linkage was required to solve the problem. As for the brake pedals, Gilbert says he just twists his foot a little and reaches them that way.

The longer than usual discharge spout took some thinking, too. It even works without an auxiliary blower, although that wasn't the original intention. "It broke," Gilbert explained, pointing to the spot at the base of the spout where the blower was supposed to be. The fan, he says, significantly increases efficiency and he intended to get it fixed and working again.

Transferring power from the trac-



Transferring power from the turned-around tractor to the modified chopper was no simple matter, says Linde.

tor to all the different cogs and chains was no small matter either. The original equipment just wasn't designed to handle the angles which Gilbert encountered on his machine. But he overcame it all with gear boxes and an extra pulley here and there.

Not surprisingly, the weight of the chopper attached to the rear of the

tractor required quite a few weights to be added to the front of it. It handles the load well.

As on the more conventional self-propelled units, Gilbert can operate all controls — including the hitch for trailing wagons — from his seat on the fender.