Rubber Tracks

Center guide lug system keeps rubber tracks on-track

Goodyear has stood alone in providing rubber tracks for skid-steer loaders for nearly a decade. Currently, Goodyear offers customers an outside guide lug Trackman® rubber track system that provides flotation, versatility, reduced compaction, traction and low maintenance with a better ride and less noise when compared to steel tracks. This system is an ideal choice for skid-steer loaders with wheelbases 41 inches and smaller.

In recent years, larger machines have moved into the marketplace to improve efficiency and productivity. To resist detracking on these longer wheelbase machines (i.e., those 42 inches and longer), Goodyear engineers designed a center guide lug Trackman rubber track system that will be introduced later this year, reports Jackie Brown, Rubber Tracks Product Coordinator at Goodyear.

The key to preventing detracking is the central placement of the guide lug between two narrow dual tires. The "square" profile of the tires' tread shoulder also keeps the track in place.

These narrow 175/95D16 tires are designed specifically for Trackman rubber tracks. Their heavy-duty sidewall maximizes wear and resists damage. A bidirectional tread pattern improves cleaning and eliminates mounting difficulties.

The controlled outside diameter guarantees optimum track tension and fit to maximize system performance.

This new center guide lug system offers the same benefits of excellent traction, flotation, etc. as the outside guide lug system.

The new system is currently being tested in the field. Feedback thus far has been very positive:

Surviving at the end of the earth

"When people talk about the end of the earth, this is the place they mean. There is nothing here: not a single tree, not a hill or valley, not a landmark of any kind for hundreds of miles in any direction. It is an endless, frozen white desert. The wind cuts like a razor, and everything — buildings, vehicles, equipment — is coated with ice."

The end of the earth that John Renner, Account Manager for Goodyear Rubber Track Products, describes is Deadhorse, Alaska. Earlier this year, he spent six days in the interior North Slope region inspecting prototype "low temperature" rubber tracks mounted on a seismic vibrator vehicle (aka, a "thumper") used to survey oil and gas reserves.

Deadhorse is located about 625 miles north of Anchorage and 265 miles north of the Arctic Circle. A typical winter day is shrouded in perpetual darkness (the sun sets in late November and doesn't rise again until mid-January) with temperatures that range from 25 to 45 degrees below zero and winds that blow from 25 to 35 mph.

Yet even in the harshness and near desolation — 45 people call Deadhorse their permanent residence, but transient workers often number more than 1,000 — signs of life can be found in the dead of winter. That's when oil companies survey oil and gas reserves. The frozen tundra provides optimum echo transmission. (Surveys are conducted primarily by echo-cartography, where thumpers apply powerful vibrations to the ground and the resultant echoes are recorded.) The tundra's frozen winter state also protects its delicate environment, which when damaged, can take decades to recover.

Typically, equipment runs on steel tracks because rubber tires have difficulty in the severe terrain and deep snow, Renner explains. Rubber tires also often fail at low temperatures, causing flats and downtime. However, due to escalating environmental concern, steel tracks will likely be banned from the North Slope within the next few years.

"Rubber tracks, which offer the traction and flotation of steel tracks, combined with the environmental friendliness of tires, are the perfect solution," he says. "The fact that they allow

"My machines don't do me much good if they aren't equipped with tracks"

Dean Bitner appreciates rubber track's light touch on blacktop, concrete and grassy surfaces. He and his business partner install sewer systems for new and existing houses in the Elk River, Minnesota, area.

"In this business we need to be able to travel over driveways and through yards without tearing them up," he explains.

Bitner has become accustomed to the performance advantages of rubber tracks. For the past six years his skid-steer loaders have been equipped exclusively with Goodyear rubber tracks. He estimates that they improve efficiency by 40 percent over comparative wheeled equipment.

"It's unbelievable how well rubber tracks perform, especially in marginal conditions," says Bitner. "For our conditions, rubber tracks are the best option."

Bitner became familiar with the new center guide lug Trackman rubber track system when his equipment dealer loaned him a 75-hp Melroe 863 skid-steer loader for a month last spring. After using those prototype tracks, Bitner placed an order for an identical machine for his business. Currently it's equipped with wheels until the center guide lug rubber tracks become available later this year. Because he prefers tracks, it's seen only about 30 hours of use.

"My machines don't do me much good if they aren't equipped with tracks," he says. "We build a lot of mound systems, and it can be difficult to get up the back side of them because of the slope. But this new track system can handle it. It's incredible what it'll go through."

Bitner likens the larger skid-steer loader and center guide lug rubber track system to a small excavator or bulldozer.

"I could skim off dirt by the bucketful with that prototype machine and track system," he says. "My other loader would spin when asked to do that. But these new tracks bit into the soil and got great traction."

Bitner also appreciates the center guide lug system's resistance to detracking, especially with a flat tire.

"Until now, no one made a rubber track system specifically for longer wheelbase machines," he says. "With this new style I can continue to work with a flat tire. Because the rib runs between dual tires, they don't walk out of the tracks. I can continue to work, then fix the flat at the end of the day so I don't have any downtime associated with flats.

"I'm sold on this new track system. It's one reason why I upgraded to a higher horsepower skid-steer loader."

"I wouldn't be without tracks on any of my new machines"

Like Dean Bitner, Joel Vreeman has relied on rubber tracked skid-steer loaders for several years.

"Once you use rubber tracks, you won't want to be without them," he says. "We have some wheeled machines, and none of the crew ever

improved machine transport speeds and terrain handling makes them even more attractive."

Vehicle mobility and reliability are paramount concerns. The frozen tundra is very uneven with small hillocks, frost-heaved berms, low bluffs and riverbeds. Snow is typically 18 to 24 inches deep, although equipment must also traverse expanses of bare ice.

"But Goodyear's rubber tracks are performing flawlessly in these conditions," Renner reports. "They show no temperature-related distress such as cracking, chipping or chunking.

"The customer loves the performance — flotation, traction and ride — of rubber tracks. The vibrator unit can travel across the tundra at a faster speed than its wheeled counterparts, and it's able to cross more severe terrain with steeper slopes, deeper snow, etc. In fact, the tracked machines have such exceptional traction that they routinely rescue wheeled machines that become stuck."

Renner plans to return to the North Slope region next winter to monitor the performance of the rubber-tracked thumper.

"I find myself hoping that when I do, it will be brutally cold and the wind will be whipping down off the icepack with a fury," he writes in his diary. "There's something about the harshness of this, the end of the earth, that stands like a challenge." **R**

wants to run them. They prefer the rubber-tracked skid-steer loaders."

One especially sought-after machine is a CAT 246 loader equipped with the center guide lug Trackman® rubber track system. For the past year and a half, Vreeman has used it for his excavating business near Willmar, Minnesota. He uses it in a wide variety of soil conditions, including mud, sand, gravel and grass and on paved surfaces for building houses and commercial businesses, highway drainage, even cemeteries.

"It really shines in rocks, sand and gravel," he says.

"That's where it will outperform any regular skid-steer loader. The rubber tracks carry the machine much better. It stays on top of the surface and doesn't sink or spin out. Its ability to float is unmatched."

Vreeman says it also excels in uneven terrain.

"In rough conditions the rubber tracks smooth out the ride," he reports. "They have totally changed the machine. The difference is like night and day."

Before using the new track system Vreeman also struggled with detracking.

"On the new machine with the Goodyear center guide lug system, we haven't thrown any tracks," he says.

Vreeman credits the dual wheel system to eliminating detracking problems.

"They clean out better than a single tire system," he says. "That eliminates mud buildup between the tires and tracks that causes the tracks to detrack.

"The rubber tracks are a good fit for our application. I would not be without them on any of my new machines."

Barry Richardson was grateful to have a rubber-tracked skid-steer loader when heavy rains soaked site conditions.

"Even with the heavy rainfall, the rubber tracks float easily over the top"

Western Wisconsin was wet this past spring and early summer.

But Barry Richardson doesn't let rain sideline his construction crew and equipment. The day after a storm dumped several inches of rain and high winds toppled large branches and trees, he and his crew were back on-site constructing a 300-stall, 60- by 380-foot freestall barn near Mondovi, Wisconsin. His Gehl 6635 rubber-tracked skid-steer loader continued to move effortlessly through large puddles of water and mud.

"This spring and summer have been very wet," he says. "We've had tough site conditions all year. This particular freestall barn project happens to be in sandy soil conditions. Even with the heavy rainfall the rubber tracks float easily over the top. They've done really well in these wet conditions."

Richardson, his brother Brian, and his brother-in-law, Galen Koller, own a construction company based in Durand, Wisconsin, that specializes in dairy facilities and new homes. They've been using their skid-steer loader equipped with the center guide lug rubber track system since April.

The ability to move about in wet conditions is critical to keeping crews on schedule. When the *Revolutions* staff visited with Richardson he was three weeks into a six-week project. Then it was on to another dairy facility nearby.

"This is the first set of rubber tracks we've used," he says, adding that they have used steel track in the past. "We're very glad to have them for these conditions. Even in wet clay they've been able to get around when wheeled machines can't.

"Plus, the rubber tracks don't chew up concrete and blacktop like steel tracks can." **R**