

Wheel Loader Helps Contractor Achieve Sustainability

With increased fuel efficiency and an SCR-only Tier 4 engine, the 921F wheel loader helps Chamness Technology live its message of sustainability through its work.

By Philippe Bisson, brand marketing manager, CASE Construction Equipment

With 27 years in business and a mission statement of “Bioservices to grow on,” [Chamness Technology](#) focuses on capturing organic matter and converting it into something of value.

With four compost sites located throughout the Midwest, the company takes commercial and industrial organic streams of material and converts it into soil-enhancing compost. For Chamness, the idea of sustainability goes beyond just its end product – the company puts the same principles into its equipment buying decisions, working to match productivity goals with equipment that proves efficient in terms of fuel use and emissions standards.

“Sustainability is about efficiency. We hear the legitimate discussion about environmental concerns. Economics has to balance with that, too,” says Dave Klockau, director of sales and marketing at Chamness. “When you put those two together, that’s why it’s so important. That’s where environmental issues and economic goals come together with efficiency.”

The company boasts a fleet of more than 40 different pieces of construction equipment, including wheel loaders, skid steers and excavators. The company added a new [Tier 4 Interim 921F](#) from [CASE Construction Equipment](#) to its fleet. Powered by a selective catalytic reduction (SCR)-only Tier 4 engine and proving to boast noticeable fuel efficiency ratings – the machine has fit squarely in the company’s mantra of sustainability and efficiency.

Engine Technology Tops List

Chamness Technology is not your typical “technology” company. It’s an organics recycling company that works in four different disciplines including composting, wood grinding and lagoon cleaning.

The company also has a business called GREEN RU, which collects food waste from commercial sources such as grocery stores, restaurants, hospitals and schools. With two routes in eastern Iowa, they use the collected food waste to make compost.

“This is a production facility. We bring in about 50,000 tons a year to make our product. We total about 30,000 tons a year just for the site in Iowa,” Klockau says. “You’ve got to have the equipment to do that job.”

The 921F purchased by Chamness uses SCR technology to meet Tier 4 Interim regulations (CASE has since released a Tier 4 Final 921F). This system treats emissions separately with Diesel Exhaust Fluid (DEF), which doesn’t require the

engine to re-circulate exhaust gas. SCR is an after-treatment system that works separately from the engine, so it lets the machine maintain horsepower without sacrificing breakout force. This optimizes combustion and machine performance, lowers temperatures, lowers fuel consumption, and reduces maintenance and downtime. There is also no need for recirculation equipment or a diesel particulate filter (DPF) for lower long-term maintenance costs

Not to mention the wheel loader created the opportunity for Chamness to save somewhere between \$17,570 and \$30,120 in fuel savings per year¹.

“Depending on how much drive time we do each day, we’re running around 3 to 4.5 gallons per hour. On our old loaders, it would be anywhere from 4.5 up to 6.5. We’re saving about 2 to 3 gallons per hour,” says Stephen Chamness, a wheel loader operator at Chamness Technology. “Fuel is one of your largest costs for how high gas prices are nowadays. A gallon here, a gallon there – it adds up when you’re running a loader like we do every day.”

The 921F wheel loader also features four programmable power modes: ECO for maximum fuel efficiency, Standard for quick loading, MAX for aggressive digging and AUTO for engine output that responds on the fly – further helping manage fuel economy.

“The four power modes really help. There’s no sense in me running full throttle for 500-feet when I can have it in ECO mode and get the job done just as well, if not better, while saving fuel,” Chamness says.

The Right Partnership

When Chamness was looking for a wheel loader, another one of the top considerations was a loader that would provide them with a great warranty and proactive service. In case an issue arose, they wanted a reliable company to fall back on while receiving the help they needed.

Because of that, the company went to their local dealer, [Titan Machinery](#) in Des Moines, and learned about the [ProCare](#) package that came standard on their new 921F wheel loader.

“I think what separated this loader versus the competitors was the service that Titan offered us through ProCare and the telematics,” Chamness says.

ProCare is an all-in-one heavy machine support program that comes standard on CASE full-size wheel loaders. It includes a suite of product assurances including a three-year/3,000-hour full machine factory limited warranty, three-year/3,000-

¹ *Figured using a standard 251 work day year with 10 hours of operation each day, fuel savings of 2-3 gallons per hour and diesel prices ranging from \$3.50 to \$4.00.*

hour planned maintenance, and a three-year advanced SiteWatch telematics subscription.

Depending on the customer and application, ProCare can generally provide at least \$7,500 in savings from planned maintenance costs alone over the first three years of the machine².

“With ProCare, they do all the oil changes and filters, and it's all included with the purchase price,” Chamness says. “By having them come down, they have their trained mechanics do the servicing themselves. That way, it's done up to CASE's standards.”

CASE SiteWatch is a telematics, remote monitoring and data reporting solution that tracks machine maintenance, health and utilization so contractors can easily manage their fleets and optimize machine performance and utilization.

“You can tell when the loader was on, if it's been sitting, or it also sends out an email warning if it were to have a low engine oil level. It will send out an email to whoever you would like it to just to say, ‘Hey, you need to check on the loader and get it back up to standards’,” Chamness explains.

Titan proved to Chamness that they were willing to do as much work as possible to keep their equipment at a high standard. That dealer-client relationship helps optimize uptime and productivity – not to mention overall satisfaction.

“They’ve stopped by just to make sure everything is working right. They’ve had a service guy – we didn’t call him out – who was just in the area and thought he’d stop by just to make sure everything was good,” Chamness says. “It showed me that even though we never asked them, they’re willing to drive out of their way to make sure everything is okay.”

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² Figuring planned maintenance at an average cost of \$2.50 during the 3,000 hours of machine use covered by ProCare.