

Onboard with *TradeRoute*

How the Legal for Trade system revolutionized a liquid feed company's delivery process, increased profits, and reduced repair costs.

TradeRoute
RICE LAKE
WEIGHING SYSTEMS



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LIQUID FEEDS INTERNATIONAL (LFI) HAD A METERING PROBLEM. THE FLOW METERS THEY WERE USING TO CALCULATE PRODUCT DELIVERY QUANTITIES NEEDED TO BE REPLACED. They were difficult and expensive to repair, user-unfriendly, and inaccurate. Initially Legal for Trade, the meters could no longer carry that designation for LFI because the company's diversity of molasses-based liquid feed supplements had expanded. More products meant more densities, a factor for which the meters could not compensate. LFI needed a Legal for Trade onboard scale, but their treacherous delivery routes through Canada's rough country roads would demand the most durable solution.

Brian Taylor, owner of Teeterville Garage and Weighing Systems in Ontario, Canada, had recently transitioned from the farm equipment repair business to the scale industry. He approached LFI with TradeRoute®, a low-profile onboard scale which bolts onto the truck frame. "I wasn't a believer at first," remembers Ian Moore, delivery operator for LFI. "We were nervous about the scale because it was different from what we were used to. I'm a mechanical guy and I typically have to use something for a year before I'll pass judgment, but with TradeRoute, after just a couple of months I was convinced."

TradeRoute shrunk the shrink and paid for itself within six months. Additional improvements soon became evident.

Flow meters have a number of limitations. A meter can handle only certain speeds or it becomes overpowered. It cannot be run past a certain wear point before failing. Also, the liquid feed delivery system cannot be completely cleared out between products because the meter

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Measure twice, drill once. Ian Moore and Brian Taylor ensure TradeRoute is correctly positioned before drilling.

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uses positive displacement and requires liquid to be able to measure. If the liquid is cleared out the meter cannot function, which is a problem when switching products from one delivery to another.

Another issue for LFI was shrink, which is the difference between the in-stock inventory and what has been delivered. LFI had significant differences in shrink

improvements soon became evident.

“I can now clear out the entire system, weigh exactly what went off the truck, and start with the right product for the next customer without any leftovers from the previous product in the lines,” Ian says. “I couldn’t do that with meters and I didn’t realize how big of an issue that was until I had the scale.”

A day in the life of this TradeRoute starts at LFI’s bulk loading tanks.

also be a rough ride. Before offloading product, the driver activates TradeRoute, which slightly lifts the tank to get an accurate weight reading. Everything that holds product is above the scale and is weighed. The in-weight is captured by pressing a softkey on Rice Lake’s 920i® indicator and the feed is pumped off the truck. If multiple products are being delivered, the pumping process is paused and the system is cleared with air. Once all product has been delivered, everything is closed off and air is run through the line to clear all product. The weigh-out is captured by the 920i and a ticket is printed for the customer, showing what was delivered and the price. An additional ticket is printed for LFI’s office and the driver moves on to the next delivery, and typically makes 3 to 20 deliveries per day. “The ease of use is phenomenal,” Ian proclaims. “I would have never believed it works as well as it does. The accuracy it maintains through all the punishment is incredible. TradeRoute works. The system is amazing.”

It was a similar, but more extensive process before TradeRoute. The driver had to set up the meter so it was ready to measure and hand-write the measurements as the product was pumped, but he couldn’t clear the line between products. “If I had to change product from one customer to another,” Ian explains, “100 kilograms before I was done I had to close the product he was getting, open the next product, and flush the line through with the new stuff. So, any time I was doing that, there was a chance he was getting some of the wrong product. If there was a variation in density, we would not be able to get an accurate reading for what was being delivered.”

Using TradeRoute is easy, but its installation requires a unique skillset. Brian Taylor has installed 12 TradeRoutes and is an expert on the process. His previous experience in farm equipment repair has proven invaluable. His garage was already stocked with the equipment necessary for a TradeRoute installation, so when the local agriculture business began to decline, it was a natural progression to add onboard scales to his services.

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Ian Moore, delivery operator for Liquid Feeds International



TradeRoute proudly adorns the frame of LFI’s brand new Peterbilt®.

with flow meters. “All incoming products were weighed off of a bulk truck and everything that went out was metered,” Ian explains. “We thought it was just variation between the bulk truck weighing and our actual in-stock inventory process. Once we had the scale, however, our shrink dropped dramatically. We then knew it wasn’t because of variations of incoming weight, it was actually a matter of what we were selling didn’t measure up with what we had in stock. Those numbers got a lot closer because we could now accurately measure everything.”

TradeRoute shrunk the shrink and paid for itself within six months. Additional

The truck is loaded with product and the driver begins making deliveries to end users, who may be just off a highway or at the end of an un-maintained country road. The latter involves constant shaking, bumping, clanking, and thumping, and has taken its toll on the truck. Fenders have fallen off and many systems have fallen apart or simply failed, but in 10 years of abuse, with only standard annual maintenance TradeRoute maintains its structure and accuracy.

Once a location has been reached, delivery can be made to the customer’s holding tank (typically near a silo or feed room) or lick tank in the pasture, which can

Soon after, the scale business became more profitable than farm equipment repair and his garage became a full-time scale shop. Capitalizing on his rare mix of scale and automotive knowledge mixed with fabrication and body work skills, Brian receives TradeRoute installation requests from across Canada.

“The first ones were a real challenge,” Brian remembers. “Now, I just have to do a lot of thinking before I even drill the first hole. I’ve learned that I really have to come into it with focus. I can’t be working on other things at the same time. Every TradeRoute installation is different. It requires mechanical skills and the ability to think on my feet. It’s best when installed in conjunction with a new tank so they can engineer the tank with the scale in mind. As long as the tank company knows what’s going on, there’s no problem working with it.”

Brian not only installs and services TradeRoute, but was also involved with Weights and Measures Canada to set up the TradeRoute certification program. He performs these certifications at his scale shop, and also provides annual TradeRoute maintenance services. This typically includes inspecting the bushings, checking for cracks (which he has never found), bolt tightness, and repainting.

“Everything works well, and I’ve had very few problems over the past 10 years,” Brian says. “I have done three-module, four-module, and six-module systems. All of my work comes from word of mouth. The product speaks for itself.”

LFI plans to install more TradeRoutes as their existing fleet is updated. With their business continuing to grow, the benefits of Legal for Trade onboard scales are extrapolated. The easy-to-use, durable TradeRoute will find itself on more trucks, conquering the bumpy country roads of Canada and providing accurate weighments each and every time. ■

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Onboard with Precision Loads

RICE LAKE'S NON-LEGAL FOR TRADE ONBOARD SYSTEM EMPOWERS VACUUM TRUCK DRIVERS TO MONITOR THEIR COLLECTION WEIGHTS.

Roslin Enterprises, in Princeton, Ontario, has come a long way since their unique beginnings. The company started as part of a turkey farm, but it didn't take long for the rendering business to outgrow the ranch. They built a new facility dedicated to rendering where today, their business includes grease collection and ingredient mixing based on customer recipes.

In 2010, Roslin needed an onboard weighing solution for their vacuum trucks, which are used to collect grease and cooking oil. The company refines and purifies these products, then ships them to the United States for use in the biodiesel industry.

The first attempt at an onboard scale came in the form of an air-bag sensor kit mounted to the truck suspension. “It was something we found on the Internet,” says Scott Dennis, co-owner of Roslin Enterprises. “We installed the air pressure system but it never worked right. The weights were all over the place. We learned very quickly that a better solution was needed so we went to Brian Taylor [owner of Teeterville Garage and Weighing Systems] and he recommended Precision Loads.”

The first Precision Loads system worked so well that Roslin Enterprises has installed it on the rest of their fleet. “Every truck that we buy from now on, we just put it on. It’s not even a discussion,” Scott says. “They work really well and we’ve never had any problems at all. Today, I couldn’t imagine our trucks without them.”

Roslin Enterprises has installed Precision Loads on their entire fleet.

