

Easy Truck Routing

NORTH DAKOTA RAIL TERMINAL AUTOMATES TRUCK RECEIVING WITH COMPUWEIGH SYSTEM



Driver takes a scale ticket from an automated ticket printer, part of an overall CompuWeigh SmartTruck automation package installed in September 2015 at a BTR Farmers Cooperative rail terminal near Leeds, ND. Photo by Sara Plum, Benson County Farmers Press, Minnewaukan, ND.

Truck automation came for the first time to the BTR Farmers Cooperative Niles terminal elevator east of Leeds, ND (701-466-2231), in the first half of September 2015, just in time for fall harvest. The 3.5-million-bushel rail terminal elevator loads a variety of commodities onto 110-car Burlington Northern Santa Fe unit trains, including corn, soybeans, hard red spring and winter wheat, durum wheat, and feed and malting grades of barley.

The relationship with CompuWeigh Corp., Woodbury, CT (203-262-9400) originally started in 2013. “We started by purchasing an OTP-4600 Outdoor Ticket Printer,” says Grain Merchandiser Randy Heck, which served its purpose of keeping drivers in their trucks and speeding up the receiving process. By summer 2015, BTR was ready to automate further by improving ticketing accuracy and consequently speed-

ing up the process further by installing SmartTruck technology.

“The biggest factor in the growth of the project was ensuring ease of use, both for the farmers and truck drivers and for our employees,” he adds.

How It Works

The SmartTruck system begins when the driver pulls up to the facility’s probe station. A CompuWeigh antenna reads an RFID card – each truck is assigned one single card tied to the truck – hanging from the passenger side visor. Heck notes that the driver does not have to wave the card in front of a sensor – the process happens automatically because the cards have a read range of up to 20 feet.

When the tag is read the previous trip’s producer/split payout percentage is displayed on a SmartView message board. If the same as the last trip, the

probe attendant confirms the selection with the driver, and if different, it is edited and displayed for the driver to confirm the change. Once the correct producer and split is selected, the truck is sent to the facility’s single inbound/outbound truck scale.

While in route to the truck scale, the grain sample is run through the facility’s moisture/test weight meter. CompuWeigh’s SmartChoice option automatically directs the truck to the correct pit matching whatever user-defined criteria have been established based on specific pit rules. Once on the scale, another RF antenna reads the RFID card, and the truck is identified automatically. Photo eyes confirm the truck is fully on the scale, the gross weight is automatically recorded and the SmartView message board automatically routes the driver to the correct pit.

In the dump pit control room, the receiving pit attendant can view all trucks that have weighed in, along with associated commodity and grade factors for each truck on a CompuWeigh dump pit workstation.

Scale Tickets

Upon returning to the truck scale, the RFID card is read once again, and the truck is identified automatically eliminating the common error of identifying the wrong truck and subsequently messing up two transactions. Photo eyes again confirm the truck is fully on the scale, the tare weight is automatically recorded, and a ticket prints from the OTP-4600 printer, as well as inside the office.

“It’s dramatically easier to route trucks through our property,” Heck says. “There’s a lot less stress on our employees upstairs (in the office building).”

Ed Zdrojewski, editor