Truck Flow Management

COMPUWEIGH SMARTTRUCK SYSTEM HELPS TERMINAL COPE WITH INCREASED VOLUME

When **Maple River Grain and Agronomy, LLC** opened its rail terminal at Casselton, ND for business in 2004, the facility had a single truck scale for both inbound and outbound trucks. It rapidly became a bottleneck.

"During the height of harvest, we've had as many as 379 trucks dumping in a 12-hour period," says **Scott Althoff**, grain operations manager.

Among the improvements made to the terminal in a general upgrade in 2010, Maple River added a second truck scale for outbound tare weights and a **SmartTruck™** scale management system from **CompuWeigh Corp.**, Woodbury, CT (203-262-9400).

How SmartTruck Works

Truckers hauling grain to Maple River are issued a special RFID tag,

A driver waits for the CompuWeigh SmartTruck system to release him from the scale while hauling a load of grain to Maple River Grain and Agronomy, LLC in Casselton, ND. SmartTalk inercom at left allows driver to speak to office staff. Photos by Robb Siverson Photography, Fargo, ND.

Grain Operations Manager Scott Althoff says that the new Smart-Truck system helps truckers move through the elevator within an average of three minutes after probing, compared to five or six minutes before the new system was installed.

which they place inside the windshield. The tag contains a unique identification number. As the truck approaches the probe station, an RF antenna scans this number from the RF tag and transmits it to a CompuWeigh GMS workstation, which then pulls up a list of recent transactions hauled by this truck.

The probe attendant then communicates to the driver via a **SmartTalk** intercom system and asks the driver questions such as "who are you hauling for," etc. The same tag is used continually on subsequent trips, since it can be reassociated with a new contact each trip. Once the origination (contract, etc.) is determined, this information then is saved within GMS to be reassociated with the unique RF tag at each subsequent station, without human intervention.

The data also appears on a CompuWeigh **SmartView** LED message board at the probe station, so the driver can verify the information.

After the load is probed and a sample sent to the office for testing, the grain inspector releases the truck and the SmartView display instructs the driver to pull ahead onto the inbound scale.

At the inbound scale, photo eyes ensure that the truck is situated entirely on the scale surface, and the truck's gross weight is recorded. The SmartTruck system is programmed to not release the truck from the scale until the sample's moisture percentage is entered into the system. Once that is known, the SmartTruck system can route the driver automatically to either a wet or a dry receiving pit, using a SmartView message board at the inbound scale.

After unloading grain at the appropriate pit, the driver proceeds to the outbound scale. Again, antenna reads the RF tag, photo eyes confirm that the truck is entirely on the scale, and the system associates the tare weight with

Driver receives a scale ticket from a CompuWeigh OTP-4600 outdoor ticket printer without having to leave his cab.

the correct transaction.

A CompuWeigh OTP-4600 outdoor ticket printer is mounted next to the outbound scale at a height that the driver can reach from the seat and take the scale ticket. The printer box includes an intercom, so the driver can communicate with the scale operator, if necessary.

Althoff says the SmartTruck system interfaces with the facility's **Agvance** grain accounting system to provide data allowing the company to proceed with settlement.

He adds that the new SmartTruck system helps truckers move through the elevator within an average of three minutes after probing, compared to five or six minutes before the new system was installed.

Ed Zdrojewski, editor