

Scale Automation System

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Equipment

This record-keeping system will rely on a touch-screen computer which will be connected to the scale, and a series of remotes which will be assigned to trucks. These remotes can either be “key fob” type remotes which can be attached to the key ring for the truck, or larger remotes closer to the size of a garage door opener. The system will also include an outdoor remote display to provide feedback to the driver. Depending on the configuration of your current scale indicator, it may be possible to use the existing display for this.

The computer set up for this system will be dedicated to use in recording scale information. You will not have the ability to install additional applications on this machine. It will be provided with a keyboard and trackpad.

Recording procedure

When a truck drives onto the scale the weight will be displayed on the remote display. The driver then presses a button on the remote to save the weight. A message on the display will then confirm that the weight has been saved, and list the truck, field, and storage location. The operator is responsible for verifying the information displayed on the remote display. If there is an error (e.g. wrong field), the operator can easily change the most recent record from the computer screen.

There will be additional buttons on the remote which will allow the driver to record an empty weight, change the field which the truck is assigned to, change the storage location the truck is assigned to, or change the crop which the truck is hauling. There will also be an option to change a entire group of trucks (for example when the crew moves to a new field).

For trucks without remote clickers there will be an option to click a button on the computer screen in the scale house to record the weight. This record can be completed by manually entering an empty weight, or selecting from the known trucks. Alternatively the record can be left open temporarily, and closed when the truck crosses the scale again. Tare and full weights can be recorded in either sequence using this method.

Assignment of Remotes

Remotes must be checked out to trucks. When a truck starts hauling, a remote will be assigned to that truck. When that truck finishes it must be noted in the database that this truck no longer has the remote. This record-keeping for the remotes is important so that if a remote is moved to a new truck the tare weight is not used from the previous machine using that remote. There is also an option for each truck to force a new tare weight after a defined duration.

Field Record-Keeping

Fields will need to be defined in the database. There will be a user-friendly interface for adding or removing fields. You can have your existing fields preloaded by providing DATA LLC with an electronic list of your fields. During harvesting operations each transport vehicle will be assigned to a field. There will be options to change this either by each individual vehicle, or to move all of the vehicles from one field to a new field. When a field is selected a crop can be assigned to it. The preloaded crops are haylage (5 cuttings), corn silage, high-moisture shell corn, corn grain, and soybeans. There will be functionality to add your own commodities as well.

Non-harvesting records

Instead of assigning a vehicle to a field, it can be assigned to another activity. For example, there may be a truck which is permanently assigned bedding. There will also be a generic category for any shipments which do not occur on a regular basis. There will be functionality to add notes to any load for later reference.

Data Storage

All records will be saved on the computer in the scale house, as well as on a remote server. The scale computer will be configured to connect to the internet. Each time a record is saved it will be recorded immediately to a remote server. This provides an instant off-site backup of the records. Data can also be saved from the scale house computer to a usb flash drive, or accessed from any computer connected the internet via the remote server. It is also possible to connect the scale computer to a printer, and configure it such that each time a load is recorded a paper ticket will be printed, or a summary sheet printed on request.

There will be an annual fee for storage on the secure server owned and maintained by DATA LLC. You will have access to your data through a password protected website, which will allow you to download the data into a format readable in Excel, or view detailed weight tickets and summary information directly on the website. Without this option there would be a lesser annual fee for technical support.

Manual Entry Option

A reduced cost version of the system is available without the remote controls or outdoor display. This option uses the same computer and software in the scalehouse, but requires an operator to select a truck and manually create a weight ticket at the computer screen.