



Aggregate and cement plants need to process trucks and railcars with speed and accuracy. Traditional radio systems, for driver-to-operator communications, are time consuming and error prone. Operators need to be able to quickly identify the trucks and railcars and match them with a customer order. Plant layouts that require multiple operators to insure vehicles are loaded with the correct product and weight can be slow and unreliable. The loadout process needs to be automated to quickly identify the trucks and railcars and insure the correct product is loaded.

### LOADTrac Provides the Following Benefits:

- ✓ Automates loadout operation
- ✓ Maximizes loading efficiency and accuracy
- ✓ Automatic tare weight discrepancy
- ✓ Tracks the amount of time trucks and railcars are in the plant
- ✓ Eliminates the wrong product being loaded
- ✓ Assures customer is invoiced for the product received
- ✓ Integrates with most existing order entry, ticketing and scale systems
- ✓ Inventory monitoring and control



*Final Scan at Weigh-Out Scale*

**ESP** has developed a customizable truck and railcar identification and loadout system called **LOADTrac**. Developed for the aggregate and cement industries, **LOADTrac** is ideal for plants that need to increase loadout accuracy and efficiency. **LOADTrac** follows the same open architecture design philosophy **ESP** implements in its control system designs. **LOADTrac** uses standard HMI software that can be customized to meet your needs. The system also has the flexibility to interface with existing order entry, ticketing and scale systems.



*LED Display At Tare Scale*

## Typical LOADTrac System

Trucks and railcars being loaded at the plant are issued radio frequency (RF) tags that identify them by an ID number. The **LOADTrac** graphical user interface (GUI) provides fill-in-the-blank menus for the operator to enter and modify vehicle data. The operator enters the ID number, hauler number, gross weight and tare weight for each vehicle.

**LOADTrac** then takes the data and places it into the customer database. As a vehicle enters the plant, **LOADTrac** interfaces with RF scanners that read the tag and identify the vehicle. Once the vehicle has been identified, the system queries the customer database for the vehicle



*RF Tag on Rail Car*

information and makes the connection with the orders queued for that shift. An electronic sign, readable from the truck cab, then displays the hauler name, amount and type of product to be loaded and directs the driver to the correct loading point. The **LOADTrac** system then sends the order



*Cab Mounted  
Loadout Terminal*

information to the loadout control system. Upon entering the loadout area, the truck or railcar is scanned again to verify the correct product is loaded. If the driver has gone to the wrong

loading point, an error message is sent to the driver and the operator. Once the tare weight is taken, the vehicle is loaded. During the loadout operation, the gross weight is monitored and the specified amount of product is automatically loaded. The loadout data can be sent to a ticketing system for automatic printing.

**LOADTrac** is flexible enough to adapt to the different scale configurations found in most aggregate and cement plants. It doesn't matter if you measure the tare weight when the vehicles enter the plant or if you measure the tare weight at the loadout silo. If discrepancies exist between the tare weight and the customer database, alarms can be sent to the operator and the correct tare weight can be recorded in the database. For applications loading from storage piles or pallets, the



*RF Scanner at Tare Scale*

order information can be sent to a loadout driver via a cab-mounted terminal that is connected to the server via a wireless Ethernet connection. Once loading is complete, the loadout driver can acknowledge that the product has been loaded and the truck can proceed to the weigh-out scale for the final scan.

As a highly adaptable system, **LOADTrac** can be customized to fit your plant's needs while matching price with functionality. If you would like to receive an estimated cost for implementing a **LOADTrac** system in your plant, please visit our web site at [www.espatl.com](http://www.espatl.com) and complete the plant survey.



1075 Progress Circle  
Lawrenceville, GA 30043  
ph: 770-682-8259  
fax: 770-277-5524  
web: [www.espatl.com](http://www.espatl.com)