PLANT ENGINEERS DIGEST

Rail Loadout Systems

Rail Loadout Systems must load rail cars efficiently and accurately. There are many decisions to be made when designing a Rail Loadout System. This publication will discuss the "Decision Tree" process and how to establish any weigh specific considerations for the system & the application.



THE DECISION TREE

The first question is "WIII this be a Legal for Trade System"? Legal for trade speaks directly to the scale system that will be weighing the product on the rail line. A legal for trade scale has undergone vigorous testing to certify the scales accuracy and overall health. The scale must meet all NTED, NIST, and Association of American Railroads (AAR) requirements & certifications regarding rail scales. A non-legal for trade scale is not required to be certified.

Rail scales are either static or weigh-in-motion. Each require a decision of single draft or dual draft operation. A single draft records weights while the entire car is scaleborne. Dual draft systems record weights by summing railcar axles.

WEIGH SPECIFIC CONSIDERATIONS

For applications with more than 30 cars per day, in-motion weighing may be the best fit. Static weighing may be best suited for less than 30 cars per day. Both weighing options have their benefits and disadvantages, below is a breakdown:

In-Motion Weighing

- cars filled moving or still
- time saving no manual uncoupling
- improved worker safety
- more complex operating
 software

Static Weighing

- cars filled moving or still
- time consuming each car uncoupled & weighed
- most accurate system
- simpler operating software

Kristina Whaley - Technical Writer Plant Systems Engineering Kwarner@plantsys.com