Re-weighing and dimensioning increases revenues in LTL operations

Research has shown that in 40-50% of cases, the declared weight of palletized goods entering LTL hubs is incorrect. Unsurprisingly, the stated weight is usually lower than the actual weight. In order to recover the missed revenues, LTL carriers install re-weighing procedures, using mobile weighing systems on their forklift trucks to do this as efficiently as possible. With a RAVAS mobile weighing system, inbound pallet shipments are weighed in motion, and the weight, dimensions and ID communicated to a TMS or WMS as a single data set. All this without taking the goods out of the process, without impact on productivity. Any deviations from declared weights are invoiced to the customer.

Suitable cross docking solution

RAVAS is frequently asked for a suitable cross docking solution for these re-weighing procedures, with the least impact on loading and offloading procedures. This requires a new, efficient work cycle. On every inbound pallet the label is scanned for ID. This triggers the TMS to interrogate the scale on the lift truck for the weight of the pallet. With the real pallet weight added, the data set is completed and can be used for invoicing and planning. In the new work cycle, pallet weights are obtained while offloading the pallet from the inbound freight truck, without taking the goods out of the process. The truck operator only scans the label on the pallet for ID. The weight sampling is automated. The added weighing procedure has minimal impact on the existing cross docking operation.

ROI studies

One of the most interesting aspects of investing in re-weighing procedures in LTL operations is its return on investment. Since re-weighing immediately results in added revenues, payback time on the investment in the RAVAS forklift scales is typically in the range of two months to one year, depending on the seize of the operation. Combining the re-weighing with dimensioning also allows better planning of the outbound stream, optimizing load factors and minimizing costs resulting from overloaded freight trucks.

Investments in hardware and software

What is needed for the installation of a typical re-weighing procedure? Forklift trucks and electric pallet trucks are equipped with a RAVAS scale, integrated in the forks. The weight display on the truck is fitted with a WiFi module to communicate with the TMS (Transport Management System) over the user's wireless network. The weight scales are certified 'legal for trade', to allow invoicing of the weight measured. Any devices that emulate the TMS, already in use on the trucks, can be used for integration of the weighing procedure. To aid integration with the least changes to existing software platforms, RAVAS offers apps that act as communication interface between the TMS and the scale fleet.

In-motion weighing and dimensioning

Pallet re-weighing operations at LTL hubs are frequently combined with dimensioning, in order to invoice volume and/or weight. RAVAS works with several partners that supply dimensioning equipment, in order to produce an integrated data set of Pallet ID, weight and dimensions and present this to the customer's TMS/WMS. In order to avoid creating bottlenecks and to minimize the impact on existing operations, both weighing and dimensioning are done in motion, without the lift truck having to stop or put down the pallet.