Automated Trailer Loading/Unloading System



SGV automatically loads a trailer with finished product at the loading docks

Features

Number of Vehicles: 24–20 Loading/4 Unloading
Vehicle Type: Forked Counterbalance
Load Description: Pallets of full/empty bottles
Industry Description: Food & Beverage

Guidance Method: Laser
Vehicle Capacity: 5,000lbs

SGV Host Controls: SGV Manager – Windows XP Battery Charging Method: Automatic Battery Exchange

Benefits

- Significantly reduce pallet and product damage
- Inventory is tracked throughout the system
- Flexible solution for plant's changing production demands
- Safe, reliable delivery of pallets
- Exceeded financial targets

System Description

The SGV System serves two separate 24/7 tasks. The first task includes movement of finished product between 12 stretch wrappers at the production lines, 15 truck bays, and 35 buffer storage lanes. The second task includes pickup of pallets of empty bottles from 7 truck bays and delivery to 6 bottling lines. The SGVs are controlled by SGV Manager Software, which communicates with WMS software, and plant PLCs to facilitate movement of empty bottles and finished goods.

A fleet of 20 SGVs pick up pallets two at a time at the stretch wrappers and deliver them directly inside of trailers at the loading docks. If no trailers are available, the SGVs will block stack the pallets in 35 floor storage lanes as directed by the SGV Manager. The SGV Manager system tracks SKUs throughout the system, and maintains a record of product stored in the floor storage area.

Four (4) additional SGVs automatically unload pallets of empty bottles directly from trailers parked at the dock and deliver them to the bottling lines.

The SGVs are equipped with a single-double fork attachment which allows them to transport a single pallet or two pallets at a time depending on the material movement request.



SGV automatically unloads a trailer with empty bottles and delivers them to the filling lines.



