

AGVS APPLICATION OVERVIEW

SIEMENS DEMATIC

INDUSTRY: Warehousing/Distribution

TYPE OF AGV: Unit Load Carrier

SYSTEM STATS

Vehicles: 4
Stations: 36
Path: 1,100 feet

SYSTEM CONTROLS

- Non-wire AGV navigation
- Vehicle Manager PC
- Interface to customer host computer
- Bi-directional AGV travel
- Remote AGV dispatching
- Static and powered conveyor pick/drop stands

SYSTEM OPERATION

AGVs with powered lift/lower decks are used to transport pallets between the truck docks, storage and repack/picking areas in the distribution facility. Pallets are tracked during AGV transport.

Pallets to be transported are scanned for ID. The customer host computer communicates the pallet's destination to the AGV Vehicle Manager PC.

The AGV Vehicle Manager is responsible for selecting the closest, available AGV to carry out the next, waiting pallet transport mission. The AGVs constantly

communicate their location, whether they are loaded or empty, their battery status and where they are heading.

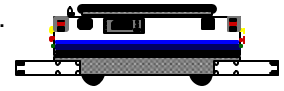
An AGV selected by the Vehicle Manager is commanded to the appropriate pallet pickup station. After it arrives, it drives under the pickup stand and elevates its deck, lifting the pallet off the stand. It then receives a destination from the AGV Vehicle Manager.

The AGVs interface with both static load rail type stands and powered accumulation conveyor. On the shipping and receiving dock, manned forklifts load and unload the AGV load stands. In all other areas, the pick and drop stands are accessed by automated conveyor or storage system equipment.

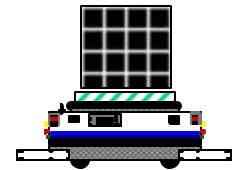
The system, with 4 AGVs is designed to support up to 50 pallets per hour. The system payback was approximately 2 years.

MODEL: DC-30

CAPACITY: 3,000 lbs.



CONFIGURATION



SYSTEM BENEFITS

- Automatic transportation of received and shipped product
- Elimination of manned vehicle travel
- Automated interface with AS/RS storage
- Reduced product damage
- Real time tracking of all transported loads

