Automated Guided Vehicle System Provides Exceptionally Accurate Positional Accuracy

Features and Benefits
Significantly reduce pallet and product damage

Track inventory throughout the system

Flexible solution for plant's changing production demands

Safe, reliable delivery of pallets

Exceeded financial targets generating a 37% ROI based on labor savings

Operates 24 hours a day, 7 days a week

Industry Group: Automatic Guided Vehicle Systems (AGVS)

Tugger AGVs tow trailers which transport tractor chassis to/from manufacturing stations

This AGV system, including all hardware and software operates 24/7 and facilitates the movement of trailers, which transport tractor chassis produced by an Industrial agricultural equipment company. The AGVs are controlled by the AGV control system software, which sends delivery requests to the vehicles.

The Host PLC initiates all order requests for each location, and the AGV control system generates these orders in response to the discrete triggers. The AGV control system creates and manages AGV orders in response to the order requests. This software also manages the traffic flow and prevents collisions between the vehicles. These AGVs cannot overtake other AGVs on the guide path.

In this system, AGVs circulate a pathway around the sub assembly area in an exact path. The tractor chassis is loaded at the first stage location and assembly takes place at seven various staged locations. The finished tractor is removed at a lift

station where the wheels are fitted and the tractor is unloaded and drives away.

A ‘tugger’ style AGV tows the trailer from station to station during the manufacturing process. The system consists of 10 vehicles – the same number of loading, queuing and assembly stations serviced in the system.

The AGV tuggers can connect to and pull one trailer at a time. Each vehicle has one battery on board and is manually charged at the end of each shift daily. AGVs connected to trailers cannot reverse but can when not hitched.

These AGVs are engineered for very accurate travel trajectory and docking. They provide easy implementation and operation using their long range laser that can scan wider depths.

JBT Corporation
400 Highpoint Drive
Chalfont, PA 18914
Phone: 215-822-4600
sgv.sales@jbtc.com
www.jbtc-agv.com