

Transbotics TJ-5

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Features/Benefits Provided:

- Increased Efficiency.
- Safe Working Environment.
- Minimized Manual Traffic.
- Flexibility to Expand System in the Future.

After deploying automatic guided carts (AGCs), the customer also improved the overall flow of material movement, optimized order management and reduced risk of damage—all while minimizing disruptions during implementation with a design platform for future expansion.

The goal was to provide a safe working environment through automation while increasing efficiency and keeping costs low. The company wanted to move its carts of shocks and trim parts within the plant, but without lift trucks. The company selected a series of AGC tuggers to carry the loads securely and reduce costs.

“Some of the most important benefits of this system have been the reduced walking time and overall reduction in manual tasks,” says the facility's plant engineer. “Our biggest concern at the outset was the possibility of a collision with a lift truck. Once the drivers became familiar with the carts' safety features and accustomed to having them around, we've had no problems.”

One system consists of one tape-guided jack pin tugger AGC that transports three of the carts throughout the layout. The AGC tows carts with shocks and trim parts from the picking area to the pre-assembly line. There is a turnaround and a workstation at each end of the guide path.

The system also includes another system with a dedicated AGC to pick up shocks from the unloading docks to the shock picking area. This design provides an expandable platform that meets current and future assembly needs. The AGCs use a magnetic tape navigation technology and controls platforms.

The result is an expandable, capable system that provides safety and efficiency with minimal disruption during implementation. The low-cost solution enabled the company to keep its retail prices stable and margins higher. The company is now evaluating other areas in its operation where automated solutions might be deployed.