Automated Guided Vehicles Provide Increased Operational Efficiency In Automotive Assembly

CUSTOMER CHALLENGE

An OEM of Automated Guided Vehicles (AGVs) discovered that the linear actuators used in the design of their AGVs were wearing out sooner than expected. This resulted in unplanned costs due to replacement of those parts under warranty. AGVs are used to move large loads with a low-to-medium throughput over short-to-medium distances. They have the ability to carry goods autonomously along predefined or dynamic routes. In this application, the actuator was used on a locking device, which was designed to pick up and deliver racks of auto parts to specific assembly areas. The OEM required an actuator that could maintain a five-minute cycle over a complete work shift, with a much longer life cycle.

SOLUTION

Duff-Norton was able to replace the previous actuator with the LT50-2-50 linear actuator, a long lasting micro limit switch actuator. This contact limit switch comes with a much longer life cycle than the previous actuators and has the ability to keep up with production specifications.

DUFF-NORTON ADVANTAGES

- Proven reliable operations across a long service life, preventing unplanned warranty repairs
- Consistent lifting and off loading to keep pace within a production environment
- Turnkey supply of components for AGV systems

AGV systems help to limit heavy goods handling by operators and ensure a safer environment (image shown for illustrative purposes only)

AGV systems are carrying assembly lines toward a more flexible future. (Image shown for illustrative purposes only, actual application not shown.)