OCEANEERING®

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QuantumMover™

Automated Guided Vehicles (AGVs)

The QuantumMover Automated Guided Vehicle (AGV) is a highly flexible, scalable and fully automated replenishment system that can accurately and efficiently deliver goods to your order picking system, production and assembly lines. The AGV is suitable for multiple logistics operations, especially in the automotive and manufacturing industries.

FEATURES

- **Intuitive user interface and obstacle detection sensor**
- **24/7 operation capacity supported by lithium-ion battery**
- **Holds totes, trays with 600 x 400 x 50 mm dimensions**

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The use of the QuantumMover with Oceaneering's unique buffer station system to simultaneously deliver and return product bins offers our latest innovative approach to rapid, reliable autonomous material handling. First, bins are transported via conveyor belt to the buffer station, which consists of two container towers with storage capacity for up to 20 bins. The bins are pushed onto the elevator in between the station's two container towers, lifted and slid onto racks in the towers. The QuantumMover AGV, which also carries two container towers with storage capacity for up to 20 bins, then drives up to the buffer station and aligns with it. Once the AGV is aligned, the bins from the buffer station are pushed all at once into the AGV's container. The AGV then moves throughout a facility to deliver full product containers and retrieve empty containers. The QuantumMover also can return up to 20 empty bins to a buffer station simultaneously. Here, the AGV unloads the empty bins to the buffer station, and the buffer station removes the bins from the container towers and unloads them onto the conveyor belt.

These AGVs are controlled by Oceaneering's proprietary supervisory SuperFROG® software system, which provides logistical solutions to execute mission-critical operations. Using WiFi, SuperFROG controls fleet and traffic management, including various logistics functions, and order fulfillment. It also defines vehicle traffic rules, collects AGV performance data, and optimizes battery consumption and charging requirements.

Vehicle Design

QuantumMovers are specifically designed to meet multiple logistics challenges with a highly engineered and flexible common base platform. The design includes a modular base platform that provides a cost-effective, efficiently manufactured, and easy-to-integrate vehicle. The AGV is a dual drive automated guided vehicle with two container towers between a front and an end AGV compartment with drive/steer wheel units on both ends. The dual drive configuration enables sideways driving in a tight layout to ensure accurate positioning at load pick up and drop off points. QuantumMovers also can be integrated into a larger system of AGVs–of like and different types–operating within the same layout, managed by one SuperFROG.

Technical Data

Wheel config.	4-wheel
Drive motor	24V AC, 2.6 kW
Dim. (L x W x H)	141 x 43 x 94 in 3575 x 1100 x 2400 mm
Maximum payload	Maximum 20 positions of 50 kg per carrier
Maximum handling height	10 in/245 mm minimum to 63 in/ 1600 mm
Navigation	Magnet, laser
Standard power	Lead acid 24V/420A.h
Optional power	LTO 24V (high capacity, fast recharge)
Recharge method	Capacity, opportunity, swap, manual
Safety	Various integrated safety features including emergency stop button, obstacle detection sensors, and collision prevention systems (optional)
User interfaces	Touch screen, joystick, auto/ manual, on/off and pause

* Height does not include laser mast navigation

Oceaneering AGV Systems for Advanced Logistics Solutions

Oceaneering is a worldwide leader in safe, reliable, and flexible turnkey logistic and production solutions based on AGV technology. Through innovative application of our field-proven hardware and software, our customers can benefit from adopting our AGV systems in mission-critical operations, providing long-term strategic value.

- For more information: **oceaneering.com/AGV**