Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:08:34 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36

Average Utilization: 68.9% Throughput Increase: 34.2% Labor Cost Reduction: 28.5%

ROI Period: 2.3 years

Warehouse Performance

Warehouse Location	Capacity Used	Inbound/ Day	Outbound/ Day	Picking Accuracy	Automation Status Level	
Distribution Chicago, IL Center A	43.9%	1,515	1,611	98.1%	68.8%	Improvemen t Needed
Distribution Dallas, TX Center B	79.1%	1,494	3,910	98.3%	67.4%	Improvemen t Needed
Distribution Atlanta, GA Center C	37.8%	2,923	2,248	95.6%	74.9%	Improvemen t Needed
Distribution Los Center D Angeles, CA	52.0% \	2,464	1,572	96.0%	72.8%	Improvemen t Needed
Distribution Newark, NJ Center E	100.4%	1,197	3,128	99.4%	60.9%	Improvemen t Needed

Optimiz ation O pportun ities

Deploy 5 additional AGVs in Warehouse 3 to increase throughput

by 20%

- Imple ment voicepicking system to improve accuracy to 99.8%
- Upgra de WMS integration for real-time inventory visibility
- Add au tomated sortation system for small package handling
- Imple ment predictive analytics for demand-based staffing
- Consid er AS/RS system for highvelocity SKUs