Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:04:48 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 64

Average Utilization: 74.5% 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	66.4%	1,533	3,034	97.1%	72.5%	Improvemen t Needed
Distribution Dallas, TX Center B	112.1%	2,228	1,845	97.3%	61.6%	Improvemen t Needed
Distribution Atlanta, GA Center C	85.5%	1,037	3,860	95.9%	78.2%	Improvemen t Needed
Distribution Los	60.7%	2,740	3,121	98.2%	86.0%	Optimized
Center D Angeles, CA Distribution Newark, NJ Center E	⁴ 78.0%	1,524	2,805	99.0%	74.3%	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