

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:06:42 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 37
Average Utilization: 72.3%
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 Level	Status
Distribution Center A	Chicago, IL	79.8%	2,310	1,534	97.6%	78.2%	Improvement Needed
Distribution Center B	Dallas, TX	76.3%	2,085	3,406	98.3%	63.7%	Improvement Needed
Distribution Center C	Atlanta, GA	88.1%	1,234	3,121	98.4%	74.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	52.6%	2,110	2,993	97.0%	64.9%	Improvement Needed
Distribution Center E	Newark, NJ	80.4%	1,274	3,000	98.2%	80.5%	Optimized

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%

- Implement voice-picking system to improve accuracy to 99.8%

- Upgrade WMS integration for real-time inventory visibility

- Add automated sortation system for small package handling

- Implement predictive analytics for demand-based staffing

- Consider AS/RS system for high-velocity SKUs