

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:57 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 57
Average Utilization: 68.5%
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 Level	Status
Distribution Center A	Chicago, IL	90.8%	1,457	3,097	95.8%	62.2%	Improvement Needed
Distribution Center B	Dallas, TX	73.9%	2,086	1,873	95.9%	62.2%	Improvement Needed
Distribution Center C	Atlanta, GA	76.2%	2,758	1,994	99.4%	64.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	108.8%	2,915	2,302	98.2%	62.1%	Improvement Needed
Distribution Center E	Newark, NJ	87.4%	1,602	2,077	96.9%	91.1%	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