

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:39 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 44
Average Utilization: 68.7%
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	86.1%	1,420	1,999	96.4%	64.1%	Improvement Needed
Distribution Center B	Dallas, TX	75.5%	2,311	1,692	98.6%	63.9%	Improvement Needed
Distribution Center C	Atlanta, GA	95.6%	1,179	2,162	97.7%	81.4%	Optimized
Distribution Center D	Los Angeles, CA	79.2%	2,673	3,913	97.8%	61.8%	Improvement Needed
Distribution Center E	Newark, NJ	93.3%	2,243	2,357	97.9%	72.3%	Improvement Needed

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