

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:06:47 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 55
Average Utilization: 79.1%
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	67.4%	2,741	2,833	96.8%	83.6%	Optimized
	Dallas, TX	129.7%	2,740	1,967	98.3%	64.8%	Improvement Needed
Distribution Center B	Atlanta, GA	47.3%	1,264	3,619	99.1%	70.4%	Improvement Needed
Distribution Center C	Los Angeles, CA	69.7%	1,634	2,192	99.3%	90.2%	Optimized
Distribution Center D	Newark, NJ	55.2%	2,676	2,671	97.0%	86.6%	Optimized
Distribution Center E							

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