

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:25 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 62
Average Utilization: 80.7%
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	61.9%	2,663	1,979	98.8%	72.4%	Improvement Needed
Distribution Center B	Dallas, TX	67.4%	2,408	2,570	97.3%	84.6%	Optimized
Distribution Center C	Atlanta, GA	68.7%	1,832	1,627	96.2%	87.6%	Optimized
Distribution Center D	Los Angeles, CA	45.3%	2,003	2,407	98.8%	93.6%	Optimized
Distribution Center E	Newark, NJ	53.4%	1,213	3,777	97.1%	65.2%	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