

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:47 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 29
Average Utilization: 79.4%
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	74.8%	1,258	3,677	97.1%	60.8%	Improvement Needed
Distribution Center B	Dallas, TX	125.3%	1,898	3,769	96.8%	94.2%	Optimized
Distribution Center C	Atlanta, GA	83.8%	1,703	2,648	97.2%	93.9%	Optimized
Distribution Center D	Los Angeles, CA	32.6%	1,782	3,604	96.7%	65.8%	Improvement Needed
Distribution Center E	Newark, NJ	54.8%	2,533	2,521	98.2%	82.2%	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