

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:54 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 64
Average Utilization: 71.4%
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	93.8%	1,660	2,238	96.5%	61.3%	Improvement Needed
Distribution Center B	Dallas, TX	122.9%	1,462	3,448	97.7%	82.0%	Optimized
Distribution Center C	Atlanta, GA	38.2%	1,979	2,099	97.5%	61.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	51.1%	2,643	3,548	98.3%	74.0%	Improvement Needed
Distribution Center E	Newark, NJ	114.1%	2,881	2,780	96.3%	78.5%	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