

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:05:09 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 55
Average Utilization: 75.4%
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	80.1%	2,648	2,534	95.9%	78.8%	Improvement Needed
Distribution Center B	Dallas, TX	41.7%	1,097	2,319	95.1%	73.8%	Improvement Needed
Distribution Center C	Atlanta, GA	77.2%	2,206	2,052	96.2%	94.0%	Optimized
Distribution Center D	Los Angeles, CA	94.4%	2,978	1,651	96.7%	69.9%	Improvement Needed
Distribution Center E	Newark, NJ	39.0%	2,451	3,922	97.0%	60.3%	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