

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:22 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 48
Average Utilization: 82.5%
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	78.4%	1,886	3,918	96.1%	84.9%	Optimized
	Dallas, TX	111.0%	1,678	3,872	99.4%	66.0%	Improvement Needed
Distribution Center B	Atlanta, GA	75.2%	2,463	1,888	95.6%	87.8%	Optimized
Distribution Center C	Los Angeles, CA	46.9%	2,265	2,348	96.8%	82.1%	Optimized
Distribution Center D	Newark, NJ	105.9%	2,314	3,330	99.2%	91.7%	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