

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 59
Average Utilization: 70.1%
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	68.0%	2,338	3,381	95.9%	95.0%	Optimized
	Dallas, TX	46.4%	2,394	3,926	95.2%	66.7%	Improvement Needed
Distribution Center B	Atlanta, GA	62.5%	2,303	1,587	95.8%	65.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	96.2%	1,482	2,674	97.4%	60.5%	Improvement Needed
Distribution Center E	Newark, NJ	62.8%	1,298	1,960	96.8%	62.9%	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