

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 44
Average Utilization: 69.6%
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	104.2%	2,566	3,893	98.0%	60.9%	Improvement Needed
Distribution Center B	Dallas, TX	37.0%	1,135	3,285	98.7%	78.8%	Improvement Needed
Distribution Center C	Atlanta, GA	58.8%	1,704	2,241	98.0%	61.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	89.5%	1,394	3,028	95.7%	75.2%	Improvement Needed
Distribution Center E	Newark, NJ	94.2%	2,587	3,372	96.7%	72.1%	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