

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 38
Average Utilization: 68.6%
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	124.0%	2,780	3,215	97.5%	62.7%	Improvement Needed
Distribution Center B	Dallas, TX	97.5%	1,055	3,558	98.2%	73.3%	Improvement Needed
Distribution Center C	Atlanta, GA	67.4%	2,558	2,825	99.4%	62.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	69.8%	1,078	1,561	98.3%	71.2%	Improvement Needed
Distribution Center E	Newark, NJ	63.4%	1,910	2,032	98.7%	73.4%	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