

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 41
Average Utilization: 73.2%
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	47.2%	2,329	3,629	96.8%	73.7%	Improvement Needed
Distribution Center B	Dallas, TX	133.1%	2,552	3,317	97.9%	69.2%	Improvement Needed
Distribution Center C	Atlanta, GA	53.4%	2,357	2,756	99.4%	68.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	63.3%	2,952	2,398	96.2%	79.5%	Improvement Needed
Distribution Center E	Newark, NJ	35.2%	1,436	2,287	97.0%	75.3%	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