

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 60
Average Utilization: 79.2%
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	66.6%	2,613	3,436	95.1%	62.1%	Improvement Needed
Distribution Center B	Dallas, TX	34.8%	2,288	2,408	96.2%	70.4%	Improvement Needed
Distribution Center C	Atlanta, GA	73.5%	2,715	2,917	95.5%	88.0%	Optimized
Distribution Center D	Los Angeles, CA	113.9%	1,473	3,657	95.9%	87.5%	Optimized
Distribution Center E	Newark, NJ	67.5%	1,877	2,597	97.7%	88.0%	Optimized

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