

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36
Average Utilization: 69.1%
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	77.3%	2,974	2,971	97.6%	61.0%	Improvement Needed
Distribution Center B	Dallas, TX	64.0%	2,649	2,950	95.3%	90.6%	Optimized
Distribution Center C	Atlanta, GA	55.0%	1,564	2,654	97.4%	67.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	62.2%	1,805	2,006	97.7%	62.3%	Improvement Needed
Distribution Center E	Newark, NJ	49.7%	1,612	2,018	96.8%	64.3%	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