

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 73.0%
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	48.3%	1,293	3,132	95.7%	69.6%	Improvement Needed
Distribution Center B	Dallas, TX	84.9%	1,178	2,805	96.1%	73.1%	Improvement Needed
Distribution Center C	Atlanta, GA	100.7%	2,043	1,789	98.5%	81.6%	Optimized
Distribution Center D	Los Angeles, CA	55.5%	1,739	3,132	98.1%	77.7%	Improvement Needed
Distribution Center E	Newark, NJ	57.0%	1,971	2,068	96.1%	63.2%	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