

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: 75.8%
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 Status	
Distribution Center A	Chicago, IL	107.4%	1,512	2,613	98.8%	93.5%	Optimized
	Dallas, TX	104.6%	1,522	3,520	97.1%	72.2%	Improvement Needed
Distribution Center B	Atlanta, GA	60.9%	1,041	1,793	95.9%	71.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	44.4%	2,873	1,650	95.9%	73.1%	Improvement Needed
Distribution Center E	Newark, NJ	83.8%	1,527	1,789	95.7%	68.7%	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