

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 33
Average Utilization: 69.2%
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 Status	
Distribution Center A	Chicago, IL	105.1%	2,750	2,589	97.9%	82.5%	Optimized
	Dallas, TX	64.8%	2,537	2,192	95.8%	61.7%	Improvement Needed
Distribution Center B	Atlanta, GA	46.8%	1,406	3,499	96.8%	60.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	86.0%	1,278	3,836	99.2%	77.6%	Improvement Needed
Distribution Center E	Newark, NJ	83.3%	2,427	3,779	98.4%	64.0%	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