

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 53
Average Utilization: 72.7%
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	47.9%	1,863	2,705	97.3%	92.2%	Optimized	
	Dallas, TX	94.8%	1,821	2,468	95.8%	67.6%	Improvement Needed	
Distribution Center B		Atlanta, GA	65.3%	2,631	2,371	98.2%	68.6%	Improvement Needed
Distribution Center D		Los Angeles, CA	78.0%	2,606	3,545	99.2%	65.9%	Improvement Needed
Distribution Center E		Newark, NJ	103.6%	2,663	1,592	98.7%	69.4%	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