

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 79
Average Utilization: 85.0%
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	55.0%	2,556	2,647	97.6%	83.7%	Optimized
	Dallas, TX	73.8%	1,226	3,038	95.2%	87.1%	Optimized
	Atlanta, GA	57.6%	1,919	1,843	97.0%	85.9%	Optimized
	Los Angeles, CA	82.0%	1,766	1,870	98.4%	93.5%	Optimized
	Newark, NJ	42.6%	2,335	3,204	99.4%	75.0%	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