

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 42
Average Utilization: 86.2%
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 Level	Status
Distribution Center A	Chicago, IL	84.1%	2,817	2,853	98.6%	81.8%	Optimized
	Dallas, TX	52.1%	1,768	3,290	96.4%	88.5%	Optimized
	Atlanta, GA	70.4%	1,634	3,187	97.3%	94.1%	Optimized
	Los Angeles, CA	54.7%	2,679	2,777	95.6%	90.7%	Optimized
	Newark, NJ	88.0%	1,734	3,017	95.0%	75.9%	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