

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 77.8%
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 Level	Status
Distribution Center A	Chicago, IL	87.5%	1,498	1,551	96.8%	66.6%	Improvement Needed
	Dallas, TX	34.4%	1,899	2,673	95.5%	91.8%	Optimized
	Atlanta, GA	73.2%	2,676	3,755	97.6%	85.1%	Optimized
	Los Angeles, CA	39.1%	2,741	1,637	99.4%	83.7%	Optimized
	Newark, NJ	54.2%	1,388	2,489	97.9%	61.9%	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