

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 56
Average Utilization: 83.5%
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	50.1%	2,509	3,920	97.8%	85.4%	Optimized
	Dallas, TX	86.2%	2,151	2,161	96.4%	83.8%	Optimized
Distribution Center B	Atlanta, GA	59.0%	1,067	2,523	97.3%	93.5%	Optimized
Distribution Center C	Los Angeles, CA	42.3%	1,825	2,468	98.7%	62.6%	Improvement Needed
Distribution Center D	Newark, NJ	42.0%	1,588	2,423	95.4%	92.4%	Optimized
Center E							

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