

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36
Average Utilization: 77.5%
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	122.3%	2,887	1,991	96.9%	80.5%	Optimized
	Dallas, TX	100.8%	2,288	3,089	96.9%	75.3%	Improvement Needed
Distribution Center B	Atlanta, GA	54.1%	2,114	1,754	96.6%	84.1%	Optimized
Distribution Center C	Los Angeles, CA	48.6%	1,396	2,409	99.2%	66.2%	Improvement Needed
Distribution Center D	Newark, NJ	71.0%	1,470	2,842	97.6%	81.3%	Optimized
Distribution 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