

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46
Average Utilization: 77.7%
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	48.9%	1,612	3,306	99.0%	81.3%	Optimized
	Dallas, TX	98.4%	1,392	1,969	96.6%	83.9%	Optimized
Distribution Center B	Atlanta, GA	104.1%	2,525	3,091	97.9%	69.3%	Improvement Needed
	Los Angeles, CA	77.0%	2,693	1,633	95.8%	90.5%	Optimized
Distribution Center D	Newark, NJ	74.3%	2,648	3,112	97.4%	63.5%	Improvement Needed
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