

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 40
Average Utilization: 67.7%
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	85.2%	2,738	3,591	95.6%	61.5%	Improvement Needed
Distribution Center B	Dallas, TX	71.4%	2,514	3,464	99.1%	70.5%	Improvement Needed
Distribution Center C	Atlanta, GA	41.5%	1,606	1,836	97.7%	71.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	57.7%	2,244	1,627	98.3%	63.1%	Improvement Needed
Distribution Center E	Newark, NJ	83.9%	2,276	3,451	98.3%	71.7%	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