

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 78.1%
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	40.5%	1,063	2,045	97.4%	61.2%	Improvement Needed
Distribution Center B	Dallas, TX	40.1%	1,411	3,612	98.5%	90.1%	Optimized
Distribution Center C	Atlanta, GA	107.3%	1,049	1,873	97.3%	81.0%	Optimized
Distribution Center D	Los Angeles, CA	71.5%	1,249	1,689	95.4%	92.8%	Optimized
Distribution Center E	Newark, NJ	76.7%	2,556	3,609	95.2%	65.1%	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