

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 52
Average Utilization: 77.9%
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	38.4%	1,546	2,052	95.6%	77.7%	Improvement Needed
Distribution Center B	Dallas, TX	56.2%	1,966	2,443	95.4%	83.6%	Optimized
Distribution Center C	Atlanta, GA	68.1%	1,556	1,527	99.3%	83.9%	Optimized
Distribution Center D	Los Angeles, CA	54.3%	1,307	1,624	97.9%	61.0%	Improvement Needed
Distribution Center E	Newark, NJ	84.6%	1,612	1,814	95.4%	83.3%	Optimized

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