

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: 82.6%
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	84.3%	2,289	2,587	97.7%	83.7%	Optimized
	Dallas, TX	65.9%	1,513	3,068	96.2%	93.6%	Optimized
Distribution Center B	Atlanta, GA	125.3%	1,863	2,371	98.3%	74.0%	Improvement Needed
Distribution Center C	Los Angeles, CA	46.3%	1,858	3,672	95.2%	84.6%	Optimized
Distribution Center D	Newark, NJ	71.6%	2,970	2,497	95.5%	77.2%	Improvement Needed
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