

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 64
Average Utilization: 73.7%
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	55.5%	1,355	3,680	97.1%	75.6%	Improvement Needed
Distribution Center B	Dallas, TX	130.4%	2,745	3,989	98.3%	62.6%	Improvement Needed
Distribution Center C	Atlanta, GA	75.7%	1,589	2,696	98.6%	92.4%	Optimized
Distribution Center D	Los Angeles, CA	36.9%	2,078	3,127	98.4%	60.2%	Improvement Needed
Distribution Center E	Newark, NJ	34.2%	1,583	3,099	97.9%	77.8%	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