

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 26
Average Utilization: 72.8%
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	41.8%	2,629	3,161	99.3%	75.4%	Improvement Needed
Distribution Center B	Dallas, TX	75.3%	2,447	2,398	98.4%	73.0%	Improvement Needed
Distribution Center C	Atlanta, GA	70.0%	2,858	3,638	95.2%	64.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	84.4%	2,179	3,206	96.4%	82.2%	Optimized
Distribution Center E	Newark, NJ	117.7%	1,825	3,038	98.1%	68.4%	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