

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 69
Average Utilization: 72.4%
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	39.4%	1,699	3,979	97.4%	66.9%	Improvement Needed
Distribution Center B	Dallas, TX	75.5%	2,162	3,723	99.2%	62.1%	Improvement Needed
Distribution Center C	Atlanta, GA	85.7%	1,427	3,588	98.6%	71.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	55.5%	1,734	2,530	97.5%	71.0%	Improvement Needed
Distribution Center E	Newark, NJ	113.3%	1,147	3,997	96.7%	90.8%	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