

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 50
Average Utilization: 76.9%
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	115.2%	2,182	2,920	96.2%	74.2%	Improvement Needed
Distribution Center B	Dallas, TX	106.6%	1,226	1,540	97.7%	67.2%	Improvement Needed
Distribution Center C	Atlanta, GA	54.4%	1,378	2,901	98.3%	77.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	39.5%	2,099	2,878	98.6%	93.9%	Optimized
Distribution Center E	Newark, NJ	110.0%	2,444	2,996	98.6%	72.0%	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