

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 27
Average Utilization: 76.2%
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	77.3%	2,580	2,086	99.2%	79.0%	Improvement Needed
Distribution Center B	Dallas, TX	70.2%	2,380	2,741	99.3%	71.3%	Improvement Needed
Distribution Center C	Atlanta, GA	60.5%	2,034	2,585	97.1%	78.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	72.8%	2,721	1,798	97.4%	89.8%	Optimized
Distribution Center E	Newark, NJ	81.0%	2,787	2,324	95.6%	62.9%	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