

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 48
Average Utilization: 73.4%
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	87.3%	2,129	2,429	96.3%	68.1%	Improvement Needed
Distribution Center B	Dallas, TX	40.4%	1,605	2,394	97.7%	72.4%	Improvement Needed
Distribution Center C	Atlanta, GA	56.3%	1,045	2,515	98.9%	92.4%	Optimized
Distribution Center D	Los Angeles, CA	88.2%	2,248	3,111	95.9%	68.0%	Improvement Needed
Distribution Center E	Newark, NJ	73.8%	1,313	1,984	96.4%	66.1%	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