

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 54
Average Utilization: 71.4%
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	38.7%	2,929	1,575	97.0%	63.7%	Improvement Needed
Distribution Center B	Dallas, TX	73.6%	1,172	3,567	97.8%	72.2%	Improvement Needed
Distribution Center C	Atlanta, GA	71.1%	1,090	2,770	96.4%	84.2%	Optimized
Distribution Center D	Los Angeles, CA	91.4%	1,021	1,831	97.2%	67.8%	Improvement Needed
Distribution Center E	Newark, NJ	57.1%	1,044	3,875	96.6%	69.2%	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