

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 58
Average Utilization: 75.8%
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	63.5%	1,908	2,532	97.5%	75.1%	Improvement Needed
Distribution Center B	Dallas, TX	46.9%	1,273	3,775	97.4%	72.7%	Improvement Needed
Distribution Center C	Atlanta, GA	40.1%	2,914	2,059	96.8%	79.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	37.9%	2,212	2,911	96.1%	62.7%	Improvement Needed
Distribution Center E	Newark, NJ	70.2%	2,081	3,446	97.3%	88.7%	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