

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 44
Average Utilization: 69.4%
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	58.6%	2,572	3,356	98.1%	65.9%	Improvement Needed
Distribution Center B	Dallas, TX	47.5%	2,461	3,419	96.9%	75.0%	Improvement Needed
Distribution Center C	Atlanta, GA	52.7%	2,813	2,488	98.5%	64.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	89.9%	1,274	2,659	98.2%	80.4%	Optimized
Distribution Center E	Newark, NJ	56.4%	2,281	2,557	95.8%	61.5%	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