

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: 74.6%
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	72.0%	1,786	3,227	96.4%	66.0%	Improvement Needed
Distribution Center B	Dallas, TX	40.4%	2,693	2,876	95.4%	72.5%	Improvement Needed
Distribution Center C	Atlanta, GA	70.4%	1,812	2,842	95.8%	87.1%	Optimized
Distribution Center D	Los Angeles, CA	63.0%	2,505	2,135	99.2%	68.3%	Improvement Needed
Distribution Center E	Newark, NJ	48.6%	1,807	2,794	99.4%	79.2%	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