

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 86.0%
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	84.0%	1,281	1,654	97.5%	79.2%	Improvement Needed
Distribution Center B	Dallas, TX	85.8%	2,697	1,822	98.0%	95.0%	Optimized
Distribution Center C	Atlanta, GA	37.7%	1,525	2,413	98.0%	90.9%	Optimized
Distribution Center D	Los Angeles, CA	70.6%	1,072	3,652	96.5%	89.5%	Optimized
Distribution Center E	Newark, NJ	47.4%	1,731	2,360	95.4%	75.6%	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