

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 56
Average Utilization: 80.2%
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	92.8%	1,474	3,393	95.6%	72.8%	Improvement Needed
Distribution Center B	Dallas, TX	67.1%	1,144	2,684	96.8%	84.9%	Optimized
Distribution Center C	Atlanta, GA	68.6%	2,467	1,841	95.5%	88.7%	Optimized
Distribution Center D	Los Angeles, CA	124.9%	2,920	1,751	95.1%	81.6%	Optimized
Distribution Center E	Newark, NJ	71.7%	2,974	3,690	96.0%	72.9%	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