

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 57
Average Utilization: 84.6%
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	83.2%	1,593	2,548	95.6%	77.5%	Improvement Needed
Distribution Center B	Dallas, TX	50.1%	1,949	1,920	95.3%	94.0%	Optimized
Distribution Center C	Atlanta, GA	65.9%	2,348	2,891	95.9%	93.3%	Optimized
Distribution Center D	Los Angeles, CA	47.1%	2,946	3,836	96.8%	68.3%	Improvement Needed
Distribution Center E	Newark, NJ	91.6%	2,804	3,829	99.3%	89.8%	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