

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46
Average Utilization: 81.0%
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	60.0%	1,366	3,585	98.6%	68.9%	Improvement Needed
Distribution Center B	Dallas, TX	48.8%	1,652	2,211	97.5%	65.8%	Improvement Needed
Distribution Center C	Atlanta, GA	127.4%	1,438	3,305	97.2%	95.0%	Optimized
Distribution Center D	Los Angeles, CA	71.4%	2,218	3,450	95.3%	82.3%	Optimized
Distribution Center E	Newark, NJ	74.7%	2,685	2,348	97.3%	92.9%	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