

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 41
Average Utilization: 81.9%
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	78.3%	2,105	3,554	97.9%	78.7%	Improvement Needed
Distribution Center B	Dallas, TX	40.5%	2,191	3,304	97.7%	77.2%	Improvement Needed
Distribution Center C	Atlanta, GA	83.1%	2,617	2,580	96.3%	86.5%	Optimized
Distribution Center D	Los Angeles, CA	92.3%	2,132	3,066	96.8%	84.6%	Optimized
Distribution Center E	Newark, NJ	46.7%	1,916	3,326	97.3%	82.6%	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