

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 44
Average Utilization: 84.1%
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	59.3%	1,386	2,891	99.1%	75.9%	Improvement Needed
Distribution Center B	Dallas, TX	97.7%	2,542	2,592	95.1%	77.7%	Improvement Needed
Distribution Center C	Atlanta, GA	60.3%	2,508	2,789	97.8%	94.3%	Optimized
Distribution Center D	Los Angeles, CA	86.4%	2,740	1,631	98.2%	84.6%	Optimized
Distribution Center E	Newark, NJ	61.8%	2,472	3,147	98.1%	88.2%	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