

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 72
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	62.3%	2,854	2,776	97.3%	95.0%	Optimized
Distribution Center B	Dallas, TX	61.6%	2,015	2,572	96.6%	66.8%	Improvement Needed
Distribution Center C	Atlanta, GA	88.0%	2,114	1,590	96.4%	75.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	44.3%	1,544	2,994	97.3%	94.3%	Optimized
Distribution Center E	Newark, NJ	48.2%	2,894	3,164	96.2%	91.6%	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