

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 53
Average Utilization: 76.0%
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	93.4%	2,675	1,556	97.1%	61.2%	Improvement Needed
Distribution Center B	Dallas, TX	69.7%	2,377	2,892	96.6%	81.6%	Optimized
Distribution Center C	Atlanta, GA	71.2%	2,457	2,515	95.1%	87.5%	Optimized
Distribution Center D	Los Angeles, CA	76.7%	2,761	1,924	95.7%	60.9%	Improvement Needed
Distribution Center E	Newark, NJ	42.5%	1,741	3,642	99.2%	88.9%	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