

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: 78.9%
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	61.5%	1,727	2,463	98.6%	74.7%	Improvement Needed
Distribution Center B	Dallas, TX	50.7%	1,640	3,530	99.3%	84.1%	Optimized
Distribution Center C	Atlanta, GA	48.0%	1,558	3,313	95.7%	61.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	73.2%	2,594	3,989	99.0%	87.9%	Optimized
Distribution Center E	Newark, NJ	71.9%	2,721	2,148	97.2%	86.3%	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