

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 51
Average Utilization: 81.8%
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	107.6%	1,489	1,712	95.0%	86.7%	Optimized
	Dallas, TX	86.8%	1,555	3,846	96.1%	73.7%	Improvement Needed
Distribution Center B	Atlanta, GA	67.9%	2,861	3,455	98.9%	87.6%	Optimized
Distribution Center C	Los Angeles, CA	70.1%	2,058	3,872	96.0%	82.0%	Optimized
Distribution Center D	Newark, NJ	81.3%	1,776	3,408	97.9%	79.2%	Improvement Needed
Distribution Center E							

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