

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 30
Average Utilization: 79.4%
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	87.9%	2,120	2,240	99.1%	61.4%	Improvement Needed
Distribution Center B	Dallas, TX	38.3%	2,082	2,163	96.6%	81.9%	Optimized
Distribution Center C	Atlanta, GA	49.2%	2,195	2,316	95.8%	89.9%	Optimized
Distribution Center D	Los Angeles, CA	60.0%	2,744	3,886	96.4%	85.7%	Optimized
Distribution Center E	Newark, NJ	67.4%	2,777	3,720	98.4%	77.9%	Improvement Needed

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