

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 33
Average Utilization: 80.7%
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	44.7%	1,675	3,657	97.0%	68.5%	Improvement Needed
Distribution Center B	Dallas, TX	113.8%	1,747	3,163	97.3%	91.3%	Optimized
Distribution Center C	Atlanta, GA	95.2%	2,849	1,671	98.6%	92.7%	Optimized
Distribution Center D	Los Angeles, CA	74.5%	1,591	3,105	98.5%	82.8%	Optimized
Distribution Center E	Newark, NJ	55.7%	2,873	1,682	96.9%	68.3%	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