

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 62
Average Utilization: 80.2%
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	48.4%	2,823	1,539	96.5%	73.3%	Improvement Needed
Distribution Center B	Dallas, TX	72.7%	1,801	3,163	97.6%	91.3%	Optimized
Distribution Center C	Atlanta, GA	57.9%	1,676	1,780	96.9%	85.7%	Optimized
Distribution Center D	Los Angeles, CA	59.6%	2,351	3,601	95.4%	84.2%	Optimized
Distribution Center E	Newark, NJ	67.1%	1,521	1,932	96.2%	66.4%	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