

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 64
Average Utilization: 83.9%
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	80.6%	2,380	2,113	99.4%	64.7%	Improvement Needed
Distribution Center B	Dallas, TX	60.1%	1,642	3,610	96.3%	84.0%	Optimized
Distribution Center C	Atlanta, GA	54.2%	2,045	3,538	95.9%	91.8%	Optimized
Distribution Center D	Los Angeles, CA	72.4%	1,841	1,540	95.0%	91.1%	Optimized
Distribution Center E	Newark, NJ	97.5%	2,586	2,163	98.8%	87.8%	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