

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 37
Average Utilization: 80.5%
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	91.8%	2,969	1,820	96.5%	93.1%	Optimized
	Dallas, TX	116.9%	1,052	1,615	96.3%	81.4%	Optimized
Distribution Center B	Atlanta, GA	77.1%	1,449	3,858	99.1%	74.4%	Improvement Needed
Distribution Center C	Los Angeles, CA	56.0%	2,513	2,248	96.4%	72.2%	Improvement Needed
Distribution Center D	Newark, NJ	106.7%	1,842	2,668	95.9%	81.6%	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