

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 61
Average Utilization: 79.0%
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	53.8%	2,606	3,890	96.2%	82.3%	Optimized
	Dallas, TX	69.3%	2,764	1,912	98.1%	90.6%	Optimized
Distribution Center B	Atlanta, GA	46.0%	2,326	3,774	95.2%	64.5%	Improvement Needed
Distribution Center C	Los Angeles, CA	71.6%	1,483	3,611	95.8%	71.3%	Improvement Needed
Distribution Center D	Newark, NJ	125.6%	1,862	1,905	98.8%	86.1%	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