Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 40
Average Utilization: 78.0%
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	39.4%	1,998	2,218	95.5%	82.6%	Optimized
Distribution Center B	Dallas, TX	49.4%	1,344	1,857	95.1%	85.3%	Optimized
Distribution Center C	Atlanta, GA	47.9%	2,796	3,784	99.4%	62.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	61.1%	2,592	3,356	95.8%	84.6%	Optimized
Distribution Center E	Newark, NJ	39.8%	2,934	3,865	96.5%	75.2%	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