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: 74.0%
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	49.2%	1,052	3,191	96.7%	61.7%	Improvement Needed
Distribution Center B	Dallas, TX	39.6%	2,994	3,168	96.6%	77.0%	Improvement Needed
Distribution Center C	Atlanta, GA	45.3%	2,317	1,546	98.4%	61.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	82.2%	1,800	2,275	99.5%	84.6%	Optimized
Distribution Center E	Newark, NJ	127.9%	2,389	3,095	98.4%	84.9%	Optimized

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Imple

ment 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