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: 78.8%
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	76.1%	2,938	3,280	98.3%	62.7%	Improvement Needed
Distribution Center B	Dallas, TX	76.2%	1,693	2,923	99.1%	71.0%	Improvement Needed
Distribution Center C	Atlanta, GA	62.4%	2,661	3,051	99.4%	89.5%	Optimized
Distribution Center D	Los Angeles, CA	113.3%	2,173	2,724	95.0%	93.2%	Optimized
Distribution Center E	Newark, NJ	43.7%	2,858	2,424	99.1%	77.5%	Improvement Needed

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