Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 26
Average Utilization: 78.1%
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	137.5%	2,570	3,211	98.3%	63.0%	Improvement Needed
Distribution Center B	Dallas, TX	95.3%	2,976	1,999	98.9%	75.2%	Improvement Needed
Distribution Center C	Atlanta, GA	70.4%	1,521	2,885	95.1%	88.3%	Optimized
Distribution Center D	Los Angeles, CA	58.4%	2,213	3,538	95.4%	87.9%	Optimized
Distribution Center E	Newark, NJ	56.2%	2,062	2,382	97.4%	75.8%	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