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: 85.1%
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	68.6%	2,141	2,787	99.0%	87.9%	Optimized
Distribution Center B	Dallas, TX	71.3%	1,922	3,652	96.6%	81.2%	Optimized
Distribution Center C	Atlanta, GA	66.5%	2,169	2,100	98.2%	94.8%	Optimized
Distribution Center D	Los Angeles, CA	68.4%	1,292	1,727	97.0%	73.5%	Improvement Needed
Distribution Center E	Newark, NJ	43.6%	1,935	2,691	96.1%	88.1%	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