Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 62
Average Utilization: 82.4%
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	52.3%	2,568	1,992	96.8%	80.6%	Optimized
Distribution Center B	Dallas, TX	70.8%	2,529	2,840	95.8%	83.8%	Optimized
Distribution Center C	Atlanta, GA	101.5%	1,919	1,765	98.3%	89.0%	Optimized
Distribution Center D	Los Angeles, CA	109.0%	1,688	2,692	95.8%	80.3%	Optimized
Distribution Center E	Newark, NJ	73.3%	2,819	1,832	98.9%	78.5%	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