Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 66
Average Utilization: 82.7%
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	63.7%	2,015	2,087	96.4%	69.8%	Improvement Needed
Distribution Center B	Dallas, TX	60.5%	2,570	2,137	95.0%	74.0%	Improvement Needed
Distribution Center C	Atlanta, GA	122.2%	1,750	2,408	99.3%	84.1%	Optimized
Distribution Center D	Los Angeles, CA	114.7%	1,795	3,834	97.5%	92.6%	Optimized
Distribution Center E	Newark, NJ	70.3%	2,834	3,380	97.2%	92.9%	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