Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 51
Average Utilization: 76.4%
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	91.2%	2,629	2,205	97.7%	66.2%	Improvement Needed
Distribution Center B	Dallas, TX	45.7%	1,974	2,188	98.6%	76.1%	Improvement Needed
Distribution Center C	Atlanta, GA	91.1%	2,272	2,417	95.9%	84.5%	Optimized
Distribution Center D	Los Angeles, CA	94.6%	2,177	2,091	95.8%	87.3%	Optimized
Distribution Center E	Newark, NJ	93.6%	1,118	1,803	95.2%	68.0%	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