

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46
Average Utilization: 77.5%
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	45.6%	1,350	2,581	98.2%	68.0%	Improvement Needed
Distribution Center B	Dallas, TX	75.1%	1,164	2,781	97.0%	79.9%	Improvement Needed
Distribution Center C	Atlanta, GA	60.4%	1,523	3,809	98.3%	85.7%	Optimized
Distribution Center D	Los Angeles, CA	120.0%	2,083	2,447	96.0%	81.9%	Optimized
Distribution Center E	Newark, NJ	41.3%	2,143	3,245	96.1%	71.8%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for robotic arms

ment voice-
picking
system to
improve
accuracy to
99.8%

- Upgra
de WMS
integration
for real-time
inventory
visibility

- Add au
tomated
sortation
system for
small
package
handling

- Imple
ment
predictive
analytics for
demand-
based
staffing

- Consid
er AS/RS
system for
high-
velocity
SKUs