

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 56
Average Utilization: 73.9%
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	112.7%	2,093	1,607	98.3%	74.3%	Improvement Needed
Distribution Center B	Dallas, TX	102.6%	2,621	1,875	97.6%	62.4%	Improvement Needed
Distribution Center C	Atlanta, GA	62.9%	1,400	2,238	97.3%	61.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	55.2%	2,421	1,523	99.4%	81.3%	Optimized
Distribution Center E	Newark, NJ	59.8%	1,696	3,860	98.8%	89.7%	Optimized

Optimization Opportunities

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

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