

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 44
Average Utilization: 81.0%
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	50.9%	2,877	2,696	97.2%	76.3%	Improvement Needed
Distribution Center B	Dallas, TX	70.5%	2,650	3,412	99.3%	79.1%	Improvement Needed
Distribution Center C	Atlanta, GA	137.6%	2,466	1,504	95.9%	87.6%	Optimized
Distribution Center D	Los Angeles, CA	76.5%	1,065	3,626	97.3%	85.3%	Optimized
Distribution Center E	Newark, NJ	67.1%	1,317	1,903	96.2%	76.6%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement AI-driven inventory tracking in Warehouse 1

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