

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 54
Average Utilization: 76.8%
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	63.8%	2,255	1,954	97.6%	75.9%	Improvement Needed
Distribution Center B	Dallas, TX	44.4%	2,187	3,332	96.1%	74.2%	Improvement Needed
Distribution Center C	Atlanta, GA	51.7%	1,092	2,227	97.2%	85.2%	Optimized
Distribution Center D	Los Angeles, CA	65.6%	1,263	3,841	95.4%	88.1%	Optimized
Distribution Center E	Newark, NJ	80.7%	1,439	3,494	95.8%	60.4%	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