

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 39
Average Utilization: 78.4%
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	68.6%	1,193	1,893	95.4%	65.1%	Improvement Needed
Distribution Center B	Dallas, TX	70.8%	2,733	1,685	98.2%	75.0%	Improvement Needed
Distribution Center C	Atlanta, GA	52.2%	2,851	2,471	98.4%	91.1%	Optimized
Distribution Center D	Los Angeles, CA	69.5%	1,598	2,860	95.2%	94.8%	Optimized
Distribution Center E	Newark, NJ	55.9%	1,485	3,906	95.8%	65.8%	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