

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 47
Average Utilization: 73.6%
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	86.3%	2,279	2,197	95.5%	70.1%	Improvement Needed
Distribution Center B	Dallas, TX	60.3%	1,962	2,041	96.0%	62.0%	Improvement Needed
Distribution Center C	Atlanta, GA	82.0%	2,810	3,073	95.3%	84.1%	Optimized
Distribution Center D	Los Angeles, CA	76.1%	2,360	2,275	97.7%	67.9%	Improvement Needed
Distribution Center E	Newark, NJ	88.7%	1,362	2,602	98.5%	84.0%	Optimized

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Imple

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