

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 79.1%
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	95.9%	1,643	2,098	98.7%	75.6%	Improvement Needed
Distribution Center B	Dallas, TX	58.9%	1,488	3,450	98.8%	77.7%	Improvement Needed
Distribution Center C	Atlanta, GA	62.5%	2,049	3,607	98.5%	68.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	97.4%	2,039	3,811	95.8%	90.1%	Optimized
Distribution Center E	Newark, NJ	84.8%	1,657	3,645	98.6%	83.3%	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