

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 50
Average Utilization: 78.7%
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	78.1%	2,157	3,263	96.0%	78.5%	Improvement Needed
Distribution Center B	Dallas, TX	38.5%	2,273	3,461	98.9%	72.3%	Improvement Needed
Distribution Center C	Atlanta, GA	63.0%	1,114	3,712	97.2%	68.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	93.0%	2,873	3,787	97.6%	86.2%	Optimized
Distribution Center E	Newark, NJ	41.2%	2,670	2,547	99.2%	88.5%	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