

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 44
Average Utilization: 76.9%
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	66.1%	2,268	2,120	96.8%	68.0%	Improvement Needed
Distribution Center B	Dallas, TX	101.6%	2,698	3,141	95.2%	71.2%	Improvement Needed
Distribution Center C	Atlanta, GA	86.7%	2,252	2,007	96.1%	71.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	116.5%	2,903	2,681	95.2%	80.4%	Optimized
Distribution Center E	Newark, NJ	61.4%	1,204	3,478	99.5%	93.7%	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