

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36
Average Utilization: 77.7%
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	68.0%	2,972	2,555	96.0%	67.9%	Improvement Needed
Distribution Center B	Dallas, TX	77.6%	2,203	2,944	95.6%	73.8%	Improvement Needed
Distribution Center C	Atlanta, GA	61.9%	2,692	1,775	99.4%	69.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	113.8%	1,638	3,210	95.5%	85.7%	Optimized
Distribution Center E	Newark, NJ	47.6%	1,242	3,505	96.9%	91.1%	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