

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 52
Average Utilization: 78.9%
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	43.4%	2,433	3,948	98.4%	75.9%	Improvement Needed
Distribution Center B	Dallas, TX	62.0%	1,626	2,337	96.1%	63.4%	Improvement Needed
Distribution Center C	Atlanta, GA	63.6%	2,417	2,026	96.1%	89.2%	Optimized
Distribution Center D	Los Angeles, CA	80.3%	1,672	3,565	98.7%	93.0%	Optimized
Distribution Center E	Newark, NJ	92.7%	2,733	1,594	97.3%	73.1%	Improvement Needed

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