

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 54
Average Utilization: 79.4%
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	121.4%	2,480	2,541	97.5%	78.9%	Improvement Needed
Distribution Center B	Dallas, TX	111.9%	1,500	3,827	97.8%	77.7%	Improvement Needed
Distribution Center C	Atlanta, GA	55.8%	2,430	1,870	95.6%	85.8%	Optimized
Distribution Center D	Los Angeles, CA	114.1%	1,043	2,876	99.4%	62.7%	Improvement Needed
Distribution Center E	Newark, NJ	124.6%	1,104	3,763	97.2%	92.0%	Optimized

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement

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