

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 76
Average Utilization: 77.3%
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	65.6%	2,364	1,614	99.5%	73.5%	Improvement Needed
Distribution Center B	Dallas, TX	60.7%	2,944	2,076	96.0%	88.8%	Optimized
Distribution Center C	Atlanta, GA	84.0%	2,594	1,506	98.3%	62.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	81.4%	1,532	3,027	98.3%	67.6%	Improvement Needed
Distribution Center E	Newark, NJ	60.0%	2,595	2,696	95.9%	94.0%	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