

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 55
Average Utilization: 72.2%
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	66.6%	2,772	2,017	96.1%	64.5%	Improvement Needed
Distribution Center B	Dallas, TX	78.8%	1,201	1,879	97.3%	68.1%	Improvement Needed
Distribution Center C	Atlanta, GA	91.7%	2,610	2,038	98.5%	83.6%	Optimized
Distribution Center D	Los Angeles, CA	99.1%	1,892	2,605	95.2%	84.6%	Optimized
Distribution Center E	Newark, NJ	49.8%	2,231	2,753	95.3%	60.2%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for all automated systems

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