

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 50
Average Utilization: 76.1%
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	35.8%	2,720	2,360	95.6%	91.6%	Optimized
	Dallas, TX	69.9%	2,182	3,836	98.2%	65.3%	Improvement Needed
Distribution Center B	Atlanta, GA	45.0%	2,934	2,636	96.5%	69.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	91.4%	1,054	1,799	96.7%	83.0%	Optimized
Distribution Center E	Newark, NJ	72.6%	2,039	1,623	98.9%	71.2%	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