

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 78
Average Utilization: 74.1%
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	113.8%	2,571	2,517	98.3%	81.8%	Optimized
	Dallas, TX	34.1%	2,262	3,183	96.5%	62.1%	Improvement Needed
Distribution Center B	Atlanta, GA	48.9%	2,076	3,479	97.6%	69.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	118.2%	1,385	2,858	97.6%	72.7%	Improvement Needed
Distribution Center E	Newark, NJ	61.3%	1,950	2,865	97.8%	84.5%	Optimized

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