

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: 79.9%
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	93.1%	2,919	3,340	98.6%	73.6%	Improvement Needed
Distribution Center B	Dallas, TX	59.0%	1,103	2,334	95.4%	67.8%	Improvement Needed
Distribution Center C	Atlanta, GA	67.7%	2,367	3,244	96.5%	93.1%	Optimized
Distribution Center D	Los Angeles, CA	52.0%	1,524	2,212	97.9%	94.9%	Optimized
Distribution Center E	Newark, NJ	45.8%	1,470	1,856	96.3%	69.9%	Improvement Needed

Optimization Opportunities

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

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