

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 42
Average Utilization: 79.4%
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	87.2%	1,227	3,462	98.2%	77.9%	Improvement Needed
Distribution Center B	Dallas, TX	51.0%	2,734	1,815	95.6%	87.4%	Optimized
Distribution Center C	Atlanta, GA	64.0%	1,528	3,378	97.5%	78.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	83.7%	2,327	3,892	97.6%	88.3%	Optimized
Distribution Center E	Newark, NJ	71.7%	2,148	1,919	98.4%	64.9%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for robots in Warehouse 1

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