

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 56
Average Utilization: 76.5%
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	93.7%	2,859	3,143	98.0%	93.8%	Optimized
	Dallas, TX	75.2%	1,274	3,608	95.7%	81.0%	Optimized
Distribution Center B	Atlanta, GA	60.1%	1,832	2,867	96.0%	60.9%	Improvement Needed
Distribution Center C	Los Angeles, CA	96.5%	2,668	3,004	96.8%	70.8%	Improvement Needed
Distribution Center D	Newark, NJ	44.2%	2,922	2,912	97.8%	75.8%	Improvement Needed

Optimization Opportunities

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

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