

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 48
Average Utilization: 75.8%
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	46.4%	1,384	1,815	98.2%	84.9%	Optimized
	Dallas, TX	71.8%	2,991	3,703	99.4%	79.6%	Improvement Needed
Distribution Center B	Atlanta, GA	62.4%	1,852	2,197	95.2%	80.3%	Optimized
Distribution Center C	Los Angeles, CA	65.0%	2,834	2,793	95.2%	62.7%	Improvement Needed
Distribution Center D	Newark, NJ	67.6%	2,189	2,245	96.2%	71.7%	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