

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 79.7%
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	119.3%	1,730	2,625	99.2%	80.7%	Optimized
	Dallas, TX	46.4%	2,661	2,933	98.7%	92.4%	Optimized
Distribution Center B	Atlanta, GA	86.9%	1,949	2,398	96.2%	73.2%	Improvement Needed
Distribution Center C	Los Angeles, CA	50.7%	1,272	2,403	95.6%	74.3%	Improvement Needed
Distribution Center D	Newark, NJ	64.1%	2,843	2,354	98.3%	77.9%	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