

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 52
Average Utilization: 75.9%
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	33.2%	2,912	2,209	98.0%	93.9%	Optimized
	Dallas, TX	100.4%	2,439	3,626	97.3%	69.5%	Improvement Needed
Distribution Center B	Atlanta, GA	81.0%	1,070	2,298	97.2%	87.6%	Optimized
	Los Angeles, CA	100.4%	2,547	3,299	99.3%	67.6%	Improvement Needed
Distribution Center C	Newark, NJ	55.4%	1,873	3,278	96.3%	61.0%	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