

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 44
Average Utilization: 77.8%
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	65.0%	2,504	3,755	95.7%	90.7%	Optimized
	Dallas, TX	56.7%	2,267	2,064	98.1%	92.3%	Optimized
Distribution Center B	Atlanta, GA	71.8%	2,371	2,082	99.4%	74.2%	Improvement Needed
Distribution Center C	Los Angeles, CA	84.3%	1,386	2,516	97.5%	70.5%	Improvement Needed
Distribution Center D	Newark, NJ	120.5%	1,303	3,595	95.3%	61.3%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Imple

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