

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 73
Average Utilization: 77.0%
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	100.6%	1,217	3,507	96.8%	81.8%	Optimized
	Dallas, TX	51.5%	2,716	3,626	95.4%	76.5%	Improvement Needed
Distribution Center B							
Distribution Center C	Atlanta, GA	36.9%	1,406	2,109	98.9%	70.8%	Improvement Needed
	Los Angeles, CA	50.8%	2,928	1,925	97.4%	82.0%	Optimized
Distribution Center D							
Distribution Center E	Newark, NJ	55.0%	2,163	2,482	98.1%	74.0%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for all automated systems

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