

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 49
Average Utilization: 71.6%
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	50.5%	1,434	3,111	98.7%	89.9%	Optimized
	Dallas, TX	60.4%	2,313	1,983	99.4%	81.9%	Optimized
	Atlanta, GA	47.9%	2,454	2,095	98.2%	62.6%	Improvement Needed
Distribution Center B	Los Angeles, CA	44.3%	2,091	3,621	98.5%	63.3%	Improvement Needed
Distribution Center C	Newark, NJ	72.0%	1,001	2,347	96.1%	60.5%	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