

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36
Average Utilization: 78.1%
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	39.8%	1,214	2,599	97.3%	91.7%	Optimized
Distribution Center B	Dallas, TX	46.4%	2,662	2,831	97.4%	75.5%	Improvement Needed
Distribution Center C	Atlanta, GA	123.2%	1,993	1,759	96.1%	69.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	68.3%	1,770	2,439	98.9%	89.8%	Optimized
Distribution Center E	Newark, NJ	70.6%	1,252	2,605	98.4%	64.3%	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