

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 53
Average Utilization: 81.1%
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	55.3%	1,431	1,731	97.9%	71.5%	Improvement Needed
Distribution Center B	Dallas, TX	60.4%	1,501	3,100	97.9%	69.9%	Improvement Needed
Distribution Center C	Atlanta, GA	117.7%	1,012	2,223	95.4%	91.1%	Optimized
Distribution Center D	Los Angeles, CA	109.7%	1,936	2,874	98.7%	94.7%	Optimized
Distribution Center E	Newark, NJ	44.8%	1,991	1,972	99.0%	78.3%	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