

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 34
Average Utilization: 76.8%
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	104.5%	2,556	3,270	95.7%	71.9%	Improvement Needed
Distribution Center B	Dallas, TX	87.1%	2,305	2,296	97.8%	64.1%	Improvement Needed
Distribution Center C	Atlanta, GA	60.3%	1,180	3,976	99.3%	83.0%	Optimized
Distribution Center D	Los Angeles, CA	48.2%	2,224	2,620	98.5%	85.7%	Optimized
Distribution Center E	Newark, NJ	97.3%	2,818	1,890	99.3%	79.1%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for robots in Warehouse 1 to reduce downtime by 15%

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