

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 41
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	93.9%	2,508	3,799	99.1%	74.4%	Improvement Needed
Distribution Center B	Dallas, TX	60.0%	2,127	1,989	95.7%	93.3%	Optimized
Distribution Center C	Atlanta, GA	33.6%	1,105	2,930	98.5%	68.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	56.0%	1,720	3,334	98.4%	86.0%	Optimized
Distribution Center E	Newark, NJ	83.5%	1,654	3,036	95.4%	68.4%	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