

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 74.5%
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	45.3%	2,311	3,499	96.0%	60.3%	Improvement Needed
Distribution Center B	Dallas, TX	72.9%	2,042	2,301	99.5%	64.9%	Improvement Needed
Distribution Center C	Atlanta, GA	56.3%	2,809	3,195	98.3%	73.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	91.6%	1,430	3,365	98.3%	86.9%	Optimized
Distribution Center E	Newark, NJ	56.7%	2,128	3,574	98.9%	87.2%	Optimized

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