

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 57
Average Utilization: 73.4%
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	68.4%	2,139	1,640	98.9%	67.1%	Improvement Needed
Distribution Center B	Dallas, TX	82.8%	2,987	2,001	95.4%	62.8%	Improvement Needed
Distribution Center C	Atlanta, GA	73.7%	2,435	1,510	96.1%	65.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	64.1%	1,991	2,605	95.4%	89.0%	Optimized
Distribution Center E	Newark, NJ	68.9%	1,711	3,490	95.4%	82.7%	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